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NLS
Discussion
Papers

Participation in Low-Wage Labor Markets by Young Men

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September 1992

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Executive Summary

Some of the most controversial issues encountered in public debates over governmental intervention in labor markets involves questions concerning the circumstances underlying individuals participation in low-wage jobs. Competing views of the labor market suggest different policy prescriptions. Nowhere is this more evident than in the case of minimum-wage legislation. Those holding the view that some individuals become trapped in low-paying jobs and that the earnings from these jobs contribute significantly to household income advocate raising the minimum wage as an anti-poverty program. Alternatively, policymakers who view participation in low-wage markets as temporary positions offering individuals the opportunity to acquire the work experience and the additional skills needed to move on to higher-paying jobs frequently argue against minimum-wage legislation or for the inclusion of sub-minimum training wages in such legislation. These two divergent views of the role played by low-wage jobs in economic mobility are often at the root of many disputes over labor-market policy.

This report develops a comprehensive picture of the experiences of youths in the low-wage sector and the role that this experience plays in future employment and earnings prospects. This picture identifies where low-paying employment fits into the career paths of individuals in the initial stages of their life-cycle, and how these career paths vary across race-ethnic groups and educational attainments for men. We carry out our empirical analysis using data from the National Longitudinal Survey Youth cohort (NLSY). Youths are, of course, an ideal demographic group for studying involvement in low-wage sectors because they are major participants, and they are in the formative years of their lifetime employment activities. The availability of the rich information on job experiences provided by the NLSY on a diverse group of individuals, in conjunction with long observation periods, offers the opportunity to assess both the short- and the long-term consequences of involvement in low-paying employment and to determine whether such employment appears to influence subsequent mobility.

To characterize involvement in low-wage employment, we formulate an empirical framework based on a sophisticated modification of a transition probability model that synthesizes the work experiences of individuals during the initial years of their work career. This framework describes the distribution of the lengths of the number of weeks that individuals spend in various activities and the paths that they follow to and from these activities. Though our primary interest is to characterize participation in low-wage labor markets, our empirical model describes a wide variety of labor-market activities including: employment in low-wage jobs, employment in high-wage jobs, simultaneous employment in low- and high-wage jobs, involvement in educational activities, and nonemployment. Our empirical work conducts separate analyses for 4 education groups (high-school dropouts, high-school graduates, individuals with some college education, and college graduates), and for 3 race-ethnic groups (Whites, Blacks, and Hispanics).

Further, we examine the implications of 2 distinct definitions of a low hourly wage rate: one given by the lowest quintile of the wage distribution for all workers in the monthly Current Population Survey; and a second equal to $1 above the federally legislated minimum wage.

Our resulting empirical model captures 6 aspects of participation in low-wage labor markets and of earnings mobility:

- The probability that a youth will enter low-paying employment over various portions of his early career.
- The likelihood of entering or returning to low-wage employment from alternative labor-market statuses.
- The lengths of spells spent in low-wage employment, as well as in employment in high-wage jobs, in nonemployment, in educational activities, and in combinations of these statuses.
- The likelihood that a low-paying employment spell will end with a participant moving to high-wage employment, educational activities, or nonemployment.
- Measures of the total time spent in low-wage employment--or in any other state--over an extended period of time, including the number of spells and the cumulative duration during a specified horizon.
- The way in which experiences vary among individuals possessing different characteristics and labor market histories.

To summarize the implications of this empirical model in a readily understandable manner, our analysis implements a simulation approach to portray labor-market mobility during the first 10 years after leaving formal schooling in a variety of scenarios.

The empirical findings of this study offer a valuable source of information for evaluating many of the assumptions maintained by policymakers in their deliberations over labor-market policy. The report undertakes a synthesis of these results in an effort to answer the following questions:

- Among young men, who participates in low-wage sectors?
- How much does earnings from low-wage jobs contribute to income?
- Is employment less stable for workers in low-wage markets?
- Is participation in low-wage sectors temporary or persistent?
- Is low-wage employment a port-of-entry into high-paying jobs?

Disputes over the answers to these questions are often at the heart of many public debates over governmental interventions in the labor market.

Summary of Basic Findings

A synthesis of our findings provides the following answers to the above questions:

- **Among Young Men, Who Participates in Low-Wage Sectors?**

  All demographic groups have some experience. High-school dropouts and high-school graduates have a 75%-80% chance of holding a low-wage job at sometime during the first 10 years after leaving school. The participation rate of college graduates in the low-wage sector during their first 5 years after school is a surprisingly high 30%.

  High-school graduates experience the most time in low-wage jobs during the 10-year period after school, followed by high-school dropouts, with college-educated individuals having considerably less experience. The larger amount of low-wage employment for high-school graduates relative to dropouts reflects that a significant segment of the dropout population spends a considerable amount of time in nonemployment. High-school dropouts and graduates average 1-2 years of low-wage employment during the 10-year period. Approximately 50% of high-school dropouts start their employment in low-wage jobs; this percentage steadily drops for higher levels of education, falling to well below 20% for college graduates.

Measurements designed to gauge the extent of low-wage employment depend critically on the time frame used to register participation, as well as on the age of individuals. Consider the population of high-school dropouts and high-school graduates. If involvement in low-wage labor markets refers to holding any low-paying job during a 2-year period when these individuals are in their late teens, then the participation rate in low-wage employment is as large as 59%. Alternatively, if low-wage experience means holding a low-paying job during any particular quarter when these individuals are in their late twenties, then the participation rate is as small as 11%.

Regardless of the age and education of young men, participation in low-wage jobs is twice as likely to occur over 2-year horizons than in any particular quarter making up this horizon. Irrespective of the time frame used to catalog participation, the likelihood of holding low-wage jobs declines with age (by as much as 50%), with the most significant decreases occurring at the earlier ages. As individuals age, education becomes a stronger factor determining the likelihood of holding a low-wage job.

Race-ethnic differences in low-wage participation are relatively minor at young ages, but they tend to widen at older ages especially at lower levels of education. Ignoring college graduates, Blacks tend to have the highest participation rates in the low-wage sector, with no systematic ordering between Whites and Hispanics. Race-ethnic differentials are inconsequential for college graduates.

- **How Much Does Earnings from Low-Wage Jobs Contribute to Income?**

The fraction made up by earnings from low-wage jobs falls as one considers longer horizons for accumulating income and broader sources of income. Earnings from low-wage jobs is a relatively high fraction of individuals' labor income earned during the quarter during which these jobs were held; it is a much smaller fraction of total family income received over 2 years. For high-school dropouts and high-school graduates, earnings from low-wage jobs average as much as 86% of total labor income during those quarters during which such jobs were held; this average drops to as little as 30% when calculating the contribution of these earnings to total family income received over 2-year periods during which low-paying employment occurs. For college graduates, the analogous percentages are 71% and 15%.

For less-educated men who hold low-wage jobs, earnings from these jobs account on average for 65%-80% of total family income received in a quarter, and 40%-50% of family income received over 2-year periods when low-paying jobs are held. Considering individuals' labor income alone, the fraction of earnings coming from low-wage jobs for less-educated participants ranges between 69%-88% when considering the contribution of these earnings to quarterly labor income; and it ranges between 33%-61% when considering the contribution to total labor income received during 2-year periods when low-wage jobs are held.

The contributions of earnings from low-wage jobs to any measure of income over any period declines with age and with higher levels of education. The rate of decline associated with aging is much steeper for higher education levels. At the lower levels, the fraction of any measure of income made up by earnings from low-wage jobs is typically highest for Blacks, with Hispanics second, and with Whites having the lowest fractions. Race-ethnic differentials are insignificant for college graduates.

- **Is Employment Less Stable for Workers in Low-Wage Labor Markets?**

A central finding in this study concerns the role of work experience in future labor-market activities. The total amount of past employment is the main factor predicting the extent of future employment, irrespective of whether this past experience occurred recently or whether it occurred in low- or high-wage jobs. Within any education group, past employment is the primary factor governing the stability of individuals' future employment. The link between previous labor-market experience and future employment diminishes at higher education levels. A large component of the race-ethnic differentials observed in the amount of employment and the fraction of this employment spent in high-wage jobs reflects the influence of limited employment early in careers--i.e., time spent out-of-work, not time spent in low-wage jobs--that has a compounding effect on subsequent labor-market activities.

- **Is Participation in Low-Wage Sectors Temporary or Persistent?**

There is a great deal of mobility out of low-wage jobs. The evidence does not support the notion of a low-wage "trap". Young men spend relatively little time in low-paying employment in the first 10 years after school. Individuals typically experience very few entries into low-wage jobs during this period. Even for the lowest education groups, only 50% start low-paying jobs 2 times or more during the 10-year period; only 10% start such jobs more than 4 times. Further, the durations of spells in low-wage employment are surprisingly short. Typical spells last for less than 5 months for the high-school dropouts, and around 6 months for high-school graduates and beyond; 90% of all spells are completed well within 2 years. High-school dropouts and graduates average a modest 1-2 years of low-wage employment in total during the 10 years after school; the majority spend less than 1 year; and only 10% of this population spend more than 4 years in low-paying jobs.

About 50% of high-school dropouts or graduates entering low-paying employment find a high-wage job within 15 months; 90% find such employment within 3-5 years. While the typical members of race-ethnic groups wait similar amounts of time to enter high-paying employment, a component of Black high-school dropouts experience exceptionally long waits; 25% are not in high-paying employment before 3.5 years; and 10% are not in such employment even after 9 years. Most of this wait, however, does not reflect long periods spent in low-wage employment, instead it reflects much time spent out of work.

Mobility out of low-wage jobs does not vary systematically across education levels, except for college graduates who experience noticeably more rapid movement into high-wage jobs. Substantial differences exist in mobility out of low-wage employment across race-ethnic groups at lower levels of education, but these differentials steadily dissipate for the higher education groups and become inconsequential for college graduates.

If there is any notion of a "trap" in the labor market, it must incorporate time spent out-of-work along with low-paying employment. Time spent in the combined state of nonemployment and low-wage jobs provides a notion of a labor-market status more relevant than time spent in low-paying employment alone for judging the prospects of individuals in the subsequent stages of their working careers. The extent of participation in the combined status of low-wage jobs and out-of-work diminishes sharply for higher levels of education and for older workers.

Less-educated Blacks spend an exceptionally large amount of time in this status, and the experiences for some poorly-educated White and Hispanic dropouts are not much better. More than 50% of Black high-school dropouts spend more than 6.5 years in low-paying jobs or out of work during the first 10 years after school; and 10% spend more than 9 years. About 50% of Hispanics spend about half of the 10-year period in low-wage employment or out of work; and 10% participate almost 9 years in these statuses. White dropouts fare better than Blacks and Hispanics, and yet 10% of Whites spend 7.5 years or more in low-wage jobs or out of work.

The large amount of time spent in this combined state of low-wage employment and nonemployment primarily reflects the influence of insufficient labor-market experience early in the career which predicts low future employment. When individuals acquire labor-market experience, even in low-wage jobs, their prospects for future employment are significantly enhanced.

• Is Low-Wage Employment a Port of Entry into High-Paying Jobs?

Increasing employment at any wage implies more time spent in high-wage jobs in the future. The evidence supports the familiar concept of life-cycle wage growth, which depicts participation in low-wage sectors as offering individuals the opportunity to acquire the work experience and additional skills needed to move on to higher-paying jobs in the future. The acquisition of work experience in low-paying jobs at earlier ages not only implies more employment in the future, but a greater amount of this future employment takes place in high-paying jobs.

The findings generally support the view that the majority of people entering high-paying employment will not experience low-wage jobs for quite some time, though a nontrivial fraction of the high-school dropouts and graduates become involved in low-wage employment in the not-too-distant future. From time of entry into a high-wage job, 25% of high-school dropouts are in low-paying jobs within about a year. On the other hand, over 25% avoid such jobs for over 8 years.

Once in a high-wage job, educational attainment is a significant factor in determining the length of time before participation occurs in low-wage employment. Whereas 75% of the college graduates who start high-wage jobs wait at least 5 years before entering low-wage employment, about 50% of high-school dropouts are back in low-wage jobs within 3.5

years. Race-ethnic groups have broadly similar experiences in entering low-paying employment after working at a high-wage job, regardless of the level of educational attainment.

CONTENTS

Section Page

Executive Summary.......................... ES-1

1 Introduction................ 1-1
  1.1 Overview of the Literature.............. 1-6
  1.2 Outline of the Paper................. 1-9

2 Data Description.................. 2-1
  2.1 Sample Selection Criteria............. 2-1
  2.2 Defining Economic Statuses............. 2-3
  2.3 Descriptive Statistics............... 2-5
  2.4 Descriptions of Durations.............. 2-6
  2.5 Descriptions of Transitions............. 2-7

3 Earnings from Low-Wage Employment............... 3-1
  3.1 Empirical Framework................. 3-2
  3.2 Participation in Low-Wage Employment.......... 3-3
  3.3 Relative Importance of Earnings from Low-Wage Jobs.................. 3-7

4 An Empirical Framework........................... 4-1
  4.1 Probabilities Determining Initial Labor-Market Status................... 4-4
  4.2 Duration Distributions and Hazard Rates 4-4
  4.3 Entrance Probabilities..................... 4-6
  4.4 Characterizing Employment Experiences........... 4-7

5 Empirical Specifications and Estimation................. 5-1
  5.1 Parameterization of Duration Distributions and Hazard Rates...................... 5-1
  5.2 Estimation of Duration Distributions and Hazard Rates.............................. 5-5
  5.3 Parameterizations of Entrance Probabilities..... 5-7
  5.4 Estimation of Entrance Probabilities.......... 5-8
  5.5 Parameterizations of Initial-Status Probabilities... 5-10
  5.6 Estimation of Initial-Status Probabilities........ 5-10

6 Characterizing Labor Market Experiences and Mobility......... 6-1
  6.1 Simulating Employment Experiences....... 6-3
  6.2 Cumulative Experiences............ 6-4

6.2.1 Low-Wage Employment and Nonemployment.. 6-6
6.2.2 High-Wage Employment and Training... 6-10
6.2.3 Differences in Findings Based on LQ and M Definitions........ 6-12
6.2.4 Summary of Findings for Cumulative Experiences....... 6-13
6.3 Numbers of Episodes........... 6-15
6.4 Lengths of Episodes........... 6-17
6.5 Durations To and From Participation in Low-Wage Jobs.................. 6-21
6.5.1 Durations Until First Jobs..... 6-22
6.5.2 Durations To and From Low-Paying Employment After First Jobs.... 6-25
6.5.3 Time Between Low-Wage and Training Experiences..... 6-28
6.5.4 Summary of Findings for Durations To and From Low-Wage Jobs..... 6-30
6.6 Linking Work Histories and Future Labor-Market Activities............ 6-31
6.6.1 Relationship Between Previous Work Experience and Future Employment.... 6-34
6.6.2 Effects of Training and Composition of Past Employment on Future Work Activities....... 6-35
6.6.3 Summary of Findings for Work Histories.. 6-36

7 Conclusion 7-1
7.1 Among Young Men, Who Participates in Low-Wage Sectors?........ 7-2
7.2 How Much Does Earnings From Low-Wage Jobs Contribute to Income?..... 7-3
7.3 Is Employment Less Stable for Workers in Low-Wage Labor Markets?..... 7-4
7.4 Is Participation in Low-Wage Sectors Temporary or Persistent?.... 7-5
7.5 Is Low-Wage Employment a Port of Entry into High-Paying Jobs?..... 7-7
7.6 Concluding Remarks..... 7-8

References

A Appendix A A-1
A.1 The Sample.... A-1
A.2 The Variables... A-2

A.2.1 Labor-Market Experiences... A-3
A.2.2 Regular School Attendance..... A-5
A.2.3 Participation in Other Educational Programs.............. A-7
A.2.4 Sources and Amount of Nonlabor Income...... A-7
A.2.5 Demographic Variables.... A-9

B Appendix B B-1
B.1 An Econometric Framework for Estimating Duration Distributions.... B-1
B.2 Empirical Specifications of Initial Status and Entrance Probabilities..... B-12

FIGURES AND TABLES

Figures

1 Low Wage Definitions

Tables

2.1 Summary Statistics of Individual Labor Market Experiences by Education Category
2.2-LQ Summary Statistics for Spells by Education Group
2.2-M Summary Statistics for Spells by Education Group
2.3-LQ Summary Statistics for Entrances by Education Group
2.3-M Summary Statistics for Entrances by Education Group
2.4-LQ Summary Statistics for Exits by Education Group
2.4-M Summary Statistics for Exits by Education Group
3.1-LQ Participation Rates in Low-Wage Labor Markets Percentages for Young Men by Age and Education
3.1-M Participation Rates in Low-Wage Labor Markets Percentages for Young Men by Age and Education
3.2-LQ Percentage of Earnings Received from Low-Wage Employment Average Percentage by Age and Education
3.2-M Percentage of Earnings Received from Low-Wage Employment Average Percentage by Age and Education
6.1-LQ Summary Statistics for Cumulative Experiences
6.1-M Summary Statistics for Cumulative Experiences
6.2-LQ Cumulative Experiences During 10 Years Following School
6.2-M Cumulative Experiences During 10 Years Following School
6.3-LQ Number of Spells During 10 Years Following School
6.3-M Number of Spells During 10 Years Following School
6.4-LQ Length of Spells During 10 Years Following School
6.4-M Length of Spells During 10 Years Following School
6.5-LQ Durations To And From Low-Wage Employment During 10-Year Horizon
6.5-M Durations To And From Low-Wage Employment During 10-Year Horizon
6.6-1 Cumulative Weeks During Three Years Following Particular Two-Year Work Experiences for High-School Dropouts(11-)
6.6-2 Cumulative Weeks During Three Years Following Particular Two-Year Work Experiences for High-School Graduates(12)
6.6-3 Cumulative Weeks During Three Years Following Particular Two-Year Work Experiences for Some College(13-15)
6.6-4 Cumulative Weeks During Three Years Following Particular Two-Year Work Experiences for College Graduates(16+)

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1. Introduction

Characterizing the circumstances underlying individuals' participation in low-wage labor markets invariably occupies the center stage of many public debates over labor-market policy. Two divergent views of economic mobility support contrary positions in the formulation of many public policies. One view, associated in the economics literature with institutional theories of the labor market (e.g., dual labor markets), describes a world with minimal mobility where the likelihood that an individual moves far from a relative point in the wage or earnings distribution is small. According to this view, some individuals, especially minorities and women, become trapped in low-paying jobs in which there are few opportunities for advancement to high-earnings employment. A second view, associated with neoclassical theories of the labor market (e.g., human capital), presents a picture of wage and earnings mobility that portrays low-paying jobs as temporary positions. Assuming efficiency of markets, this picture depicts participation in low-wage markets as a way station offering individuals the opportunity to acquire the work experience and the additional skills needed to move on to higher paying jobs.

Public policy presumes the validity of both these views as the motivation for programs and legislation that intervene in labor markets. A frequent argument supporting minimum wage legislation, for example, is that employment in low-paying jobs is not temporary and that the earnings derived from such employment constitutes a substantial component of family income. Proponents of such legislation accept the institutional view of the labor market and argue in favor of increased minimum wages as an antipoverty program that raises the earnings of workers who are stuck at the bottom of the wage distribution. At the same time, those adopting a neoclassical view of the world with high economic mobility argue that the imposition of constraints on wages restrict the opportunity for new labor-force entrants to build skills to qualify them for future employment in higher paying jobs. The force of such arguments leads to the provision for a sub-minimum wage that defers the imposition of wage constraints for a period of time that allows for the training of workers.

Numerous debates over public policy involving labor markets hinge on the applicability of the two competing views of labor-market mobility. The desirability of publicly supported training programs is another prominent area in which the views clash. Proponents of the institutional view declare a need for government-sponsored training programs to compensate for a variety of structural failures that must be overcome to provide better employment opportunities for some individuals. These advocates view participation in low-wage markets as permanent without intervention that increases the educational attainments of individuals. To the extent that promoters of the efficient-markets view tend to support training policies at all, they advocate it as a device to allow individuals to gain entry into labor markets where they can progress beyond low-paying employment after the acquisition of work experience. A third prominent example involves public debate directed towards eradicating discrimination. Policy makers with an institutional perception of economic mobility plead the case for preferential programs or other structural changes in labor markets to improve the prospects for disadvantaged groups to exit low-wage jobs. Policymakers with an efficient-markets perception of high earnings mobility merely advocate the requirement for open job opportunities for all groups.

Surprisingly little is known about the process by which workers enter and exit low-wage employment. A large body of research describes the persistence of poverty, but this notion of income variability is only peripherally linked to low-paying employment. This loose linkage in part reflects the fact that members of nonpoverty households work in low-wage jobs, and in other part arises from the inclusion of nonwage income in the determination of poverty. There is also a considerable body of research summarizing the time series properties of earnings at the individual or household level, but such studies invariably analyze either annual earnings measures or a person's wages observed at disperse points in time. Consequently, movements to and from low-wage markets are missed unless employment in these markets is long-term and represents the principal source of earnings. Further, knowledge of intertemporal correlation patterns alone is insufficient to determine the likelihood that an individual falls into any particular earnings category. Even after integrating the evidence available from the various bodies of research, there is far too little information to enable one to formulate anything approximating a complete characterization of the types of workers who participate in low-wage labor markets, the extent to which these workers remain in such markets, and the reasons for exiting low-paying employment.

This paper develops a comprehensive picture of the experiences of youths in low-wage labor markets and the role that this experience plays in future employment and job prospects, using data from the National Longitudinal Survey Youth Cohort (NLSY). This picture identifies where low-paying employment fits into the career paths of individuals in the initial stages of their life cycle, and how these career paths vary across race-ethnic groups and education attainments for men. Youths are, of course, an ideal demographic group for carrying out a study of this sort because they are major participants in low-wage markets and they are in the formative years of their lifetime employment activities. The availability of the rich source of information on job experiences provided by the NLSY on a diverse group of individuals, in conjunction with long observation periods, offers the opportunity to assess both the short- and the long-term consequences of involvement in low-paying employment and to determine whether such employment appears to influence subsequent mobility.

To develop this picture of involvement in low-wage employment, we formulate an empirical framework that synthesizes the work experiences of individuals during the initial stage of their life-cycle, distinguishing among jobs according to whether they pay low or high wages. One cannot infer such a picture without devising a statistical model that is estimable using limited data on the activities of individuals, recognizing that the period of observation available for each person in the sample covers only subsets of those years in the life-cycle of concern in this analysis. To accomplish this task, we develop a sophisticated variant of a transition probability model (TPM), summarizing events using age, rather than calendar time, as the relevant time metric. This framework describes the distribution of the lengths of the number of weeks that individuals spend in various activities and the paths that they follow to and from these activities. Though our primary interest is to characterize participation in low-wage labor markets, we must consider a broader range of activities in our statistical model. In addition to being employed at various wages, youths spend considerable amounts of time either in educational pursuits (e.g., training) or in a nonemployment status. Consequently, our TPM describes youths' movements among five distinct activities: low-earnings employment, high-earnings employment, simultaneous participation in low-and high-earnings employment, training, and nonemployment. This requires the development of a "five-state" TPM that allows for multiple episodes in the various states. In defining the concept of a low-wage sector in this model, we consider 2 distinct thresholds for assigning hourly wage rates to the low sector: one given by the lowest quintile of the wage distribution for all workers in the monthly Current Population Survey; and a second equal to $1 above the federally legislated minimum wage.

Our statistical model provides a flexible alternative to a competing-risks model, with many features incorporated in our specifications not found in empirical applications elsewhere in the literature. Our formulation not only accounts for different forms of duration dependence, it also allows for a broad range of labor-market activities experienced prior to current episodes to influence present durations and the likelihoods of future exits to other statuses. Further, our formulation permits duration dependence to vary in a way that depends on previous work history and on demographic characteristics.

To summarize the implications of this model in a readily understandable manner, our analysis implements a simulation approach to produce a picture of labor-market mobility during the first ten years after leaving formal schooling under a variety of scenarios. The findings from these simulations provide the basis for answering a wide assortment of questions concerning the dynamic patterns of participation in low-wage labor markets and the relationships linking this participation with subsequent mobility. In addition, the results allow us to determine how these experiences differ across age and demographic groups. The summary statistics derived from the simulation analysis provide considerable information about youths' mobility across jobs offering different hourly compensation, as well as their movements to and from nonemployment and educational activities.

1.1 Overview of the Literature

There is no empirical research of which we are aware that resembles the analysis proposed here. Some longitudinal data sets covering a lengthy time horizon provide sufficient information to study the intertemporal movements in individuals' hourly or weekly wages observed at interview times which occur in one-year intervals, but even this limited source of information has not been investigated except at the most elementary level. Analysis of earnings mobility at time intervals shorter than a year over a long period has not been possible because, until the availability of the NLSY, no data set has offered weekly, monthly or quarterly information on the wages earned by individuals.

The most widely cited studies of earnings stability compare the rankings of individuals' annual labor income observed several years apart to measure the degree of relative mobility. Schiller (1977), in the most prominent study, draws a sample from Social Security records of nearly 75,000 males who were 16 to 49 years of age and earned at least $1000 in 1957 and who had positive earnings in 1971. Dividing the sample into 20 earnings categories, Schiller measures the movements of individuals among the categories between 1957 and 1971. Controlling for the effects of age, the findings indicate that workers on average moved about four categories, which leads Schiller to conclude that individuals are highly mobile across relative positions in the earnings distribution. Results from several other studies applying similar techniques generally support Schiller's findings. Kohen, Parnes and Shea (1975) carry out a comparable analysis using data from the National Longitudinal Surveys commenced in 1966. Calculating movement in family income rather than in earnings between the years 1966 and 1969 for young men, this study finds differential mobility between Whites and Blacks. Taubman (1975) examines earnings mobility using data from the NBER-TH sample which contains information on middle-aged men who were military enlistees in World War II and classified above average in IQ. Comparing earnings in 1955 and 1969, this study like the others provides evidence that there is substantial mobility in earnings over long periods starting from most positions in the earnings distribution.

This body of research at best only hints at the story of participation in low-wage labor markets. Two major shortcomings lead to this situation. First, this research analyzes mobility only in terms of movements in annual measures of total labor or family income, and low annual earnings are not synonymous with employment in low-wage jobs. On the one hand, the annual earnings of an individual may be low due to few hours worked during the year rather than employment at a low wage rate. On the other hand, annual earnings may be high even if employment in a low-wage job occurs because hours of work are high, other jobs are also held, or the time of employment in a low-paying job is short. Second, studies making up this body of research consider mobility only between two points in time set several years apart. Consequently, any mobility occurring within the period bounded by these points is totally missed and absolutely nothing is known about participation in low-wage employment during this period.

There are a variety of other studies that examine the time-series correlation properties of annual earnings or of annual average-hourly earnings over a long successive sequence of years using panel data, which indirectly provide some evidence concerning the nature of earnings mobility. Examples of this line of research include the work of Lillard and Willis (1978), Lillard (1983), Chamberlain (1984), Bhargava and Sargan (1983) and MaCurdy (1982). While this work avoids the second shortcoming noted above in that it considers information over a continuous sequence of years, it does suffer from the first shortcoming. The use of annual measures of earnings leads to serious difficulties in drawing inferences about participation in low-wage markets. Even abstracting from this problem, the empirical results from these studies are not well-suited for assessing the extent of earnings mobility because the primary findings describe only the autocorrelation structure associated with the variability in annual earnings. To measure mobility, a researcher also needs to know much more about the distributional properties of earnings and about the determination of initial conditions. Given these problems, this body of work provides very little information on the topic of mobility across employment categories paying different wage rates.

1.2 Outline of the Paper

Addressing the substantive issues motivating this research requires at a minimum an understanding of the routes followed by individuals into low-wage labor markets, the factors leading to continued participation in these markets and to return participation, and the routes of escape from these markets. Our empirical model captures these features succinctly, and its simulation provides both a complete characterization of the lengths of time that individuals typically spend in alternative activities during the early part of their lifetimes and of the likelihoods that they move among various activities in particular sequences.

Specifically, the subsequent analysis focuses on answering two fundamental sets of questions:

- How important are earnings received from low-wage employment? Do workers with low-paying jobs tend to hold more than one job simultaneously, or are they more likely to work part-time? Are low-wage earners likely to come from households where more than one member works or where there are other sources of income? How does the composition of participants in low-wage labor markets vary by such demographic characteristics as age, race, and education level?

- How temporary is employment in low-wage jobs? How likely is it that an individual who works near the minimum wage sometime during a year will be doing so at various times in the future? Are low-wage jobs "traps" of the sort envisioned by institutional theories, or do these jobs serve as ports-of-entry into job ladders with stable and higher-paying employment in the future? What is the likelihood of moving from low-earnings employment to high-paying jobs, and vice versa? What is the general nature of wage and earnings mobility among the young? Are earnings and employment less stable for workers in low-wage labor markets? What is the role of life-cycle wage growth in economic mobility?

While simple summary statistics enable us to answer aspects of these questions, we require the empirical results from the multi-state duration framework to investigate most of the issues.

The remainder of this paper consists of six sections. Section 2, which follows next, outlines the data set used in our empirical analysis, integrating information on individuals' experiences in employment with low and high earnings, in nonemployment, and in training and schooling. As a first step in answering the above questions, Section 3 presents a variety of descriptive statistics designed to measure the extent of low-wage participation across education and race-ethnic groups, along with the degree to which earnings from low-paying jobs contribute to total individual and family income. Section 4 outlines the essential elements of our econometric framework for characterizing earnings mobility; and Section 5 introduces the parameterizations used in the estimation of our statistical model, along with a brief discussion of the empirical results. Section 6 analyzes the results from the simulation of our estimated TPM model to produce a comprehensive description of labor-market mobility during the initial years after departing from school. Finally, Section 7 summarizes the results and attempts to interpret what our findings have to say about the questions posed above.

2. Data Description

Characterizing the process of economic mobility in the labor market requires very detailed work histories for individuals, not only dating their episodes of employment, but also differentiating between periods of low-wage and high-wage employment. We use the information available in the NLSY on wages and hours of work for each job held during each week to construct a complete weekly time series of employment statuses, distinguishing between jobs that pay different hourly wage rates. In addition, we can identify periods of participation in other labor market activities, such as formal schooling, training and nonemployment, on a weekly basis. These weekly series capturing the labor-market activities of young men form the foundation of the subsequent empirical analysis by providing a mechanism to classify men into various economic statuses over time. This section outlines the formulation of our sample of young men used in the subsequent empirical analysis; Appendix A presents a detailed description of our data set.

2.1 Sample Selection Criteria

The NLSY is an incomparable data source for carrying out a study of economic mobility. It incorporates both a randomly designed, nationally-representative sample of 3,003 young men, and a supplemental sample of 2,576 Black, Hispanic, or economically disadvantaged non-Hispanic, non-Black men, all of whom were ages 14 to 21 in 1978. The youths themselves were interviewed annually beginning in 1979. Information about the labor market experiences of these young men is drawn from the first ten rounds of the NLSY covering the years 1978 to 1988.

The analysis in this paper utilizes a data set of 2,699 young men drawn from the nationally representative sample of the NLSY and the supplemental samples of young Black and Hispanic men.[4] Inclusion in our data set required a man to be interviewed in every year of the first ten rounds of the NLSY and he must have "permanently" left school sometime between January 1978 and the 1988 interview date. This schooling condition is necessary to ensure that we capture a man's experiences from the time he first enters the labor market.

The empirical analysis below differentiates among young men based on their level of educational attainment at the time they "permanently" leave formal schooling. Specifically, we categorize individuals into four educational groups:

11- : persons with 11 years of education or less (high-school dropouts);
12 : persons with 12 years of education (high-school graduates);
13-15: persons with 13 to 15 years of education (some college); and
16+ : persons with 16 years of education or more (college graduates).

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[4] We exclude the respondents from the economically disadvantaged non-Hispanic, non-Black supplemental sample because the original selection of this supplemental sample suffered from several shortcomings. See Appendix A for details.

In all of our empirical work, we conduct separate analyses for each of these educational groups.

The notion of permanently leaving school differs for high-school dropouts as compared to the other education categories. An individual from one of the three higher education groups is deemed to have permanently left school at the time he is last observed attending school during the sample time frame. For example, someone who graduated from high-school, worked for one year and then enrolled in college would not permanently enter the labor market until they stopped attending college. In contrast, a young man who drops out of high-school during the sample period and does not return to formal schooling within a year is considered to have permanently left school and entered the labor force at the time he dropped out of high-school.[5] If these individuals return to school and obtain a high-school diploma or a GED in the future, we classify them as participating in a training program while they are engaged in these educational pursuits.

2.2 Defining Economic Statuses

To describe a population's participation in labor markets paying different wage levels over time, we classify individuals as occupying any one of six exhaustive and mutually exclusive labor-market statuses in any week. When a person is attending formal schooling, we refer to them as occupying labor market status or state "s". Upon leaving formal schooling, an individual occupies one of five statuses: employed in a low-wage labor market (status ℓ); employed in a high-wage job (status h); simultaneously employed in both a low- and a high-wage job (status b); involved in some type of training or educational activity (status e); and neither working nor participating in an educational activity (status n).

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[5] The year-long interruption in schooling for the high-school dropout is important because someone with an interruption shorter than a year is considered to have continuously attended school.

The distinction between low-wage and high-wage employment is a critical feature of our analysis. As the debate between the institutional and neoclassical schools of thought so markedly points out, there is not a well-defined demarcation line between these two sectors in the economy. Accordingly, we examine two distinct specifications of the wage threshold in the subsequent analysis: one based on the lowest quintile of the hourly wage distribution for all workers derived from the monthly Current Population Survey (CPS) samples (termed definition LQ); and a second based on an absolute differential of $1 above the federally legislated minimum wage (termed definition M). Comparing the results obtained for these two concepts of low wages enables us to assess the influence of different definitions on our findings.

Figure 1 graphs the values of the two thresholds defining low-wage employment over the sample period. The third line in the figure, termed the "lowest quintile trend", represents the fitted value from a regression of the lowest quintile on a second-order polynomial in time. This trend tracts the profile of the lowest quintile closely, and we use it as our threshold in the LQ definition of low wages to avoid erratic movements of the threshold; the raw lowest quintile not only jumps around, it remains constant at common values of the hourly wage rate such as at $4.00 and $5.00. As is apparent in Figure 1, the M threshold exceeds the LQ threshold by about $.75 in the late 1970s, but it rises more slower than the LQ values resulting in about a $.75 shortfall in the early 1990s.

2.3 Descriptive Statistics

Table 2.1 presents some summary statistics of the labor market experiences for the sample of young men used in our empirical analysis. The table reports separate statistics for the four education categories and for both the LQ and M definitions of low-wage employment. To account for the nonrandom composition of our analysis sample from the NLSY (e.g., the incorporation of the supplementary samples), we use weighted estimation procedures to calculate these summary statistics.

Generally, the results in Table 2.1 reveal what one would suspect about the labor market experiences of individuals with different levels of educational attainment. Looking across the four educational groups, the amount of total employment and the fraction of employment spent in high-wage jobs increases with the level of education. Further, the incidence of low-wage employment and the amount of nonemployment decreases with increases in education.

There are, however, two statistics in this table that are quite surprising. First, the incidence of training is relatively constant across the four categories. It should be noted, however, that "training" encompasses many different activities, ranging from reentry into school to training while employed. Training undertaken by college graduates is likely to be of a very different character from that by high-school dropouts. Second, there is a remarkably high participation rate in low-wage jobs for college graduates. Specifically, one out of every five young men with 16+ years of education experiences an episode of low-wage employment sometime after leaving school. Summary statistics in the later tables will shed further light on these issues.

2.4 Descriptions of Durations

Tables 2.2 presents summary statistics on the duration of spells spent in the five post-school labor-market activities (i.e., low-wage employment ℓ, high-wage employment h, both low-wage and high-wage b, training e, and nonemployment n). The tables designated Table 2.2-LQ use the lowest-quintile as the low-wage cutoff; and those marked Table 2.2-M utilize the minimum wage plus $1 as the threshold for classifying low-wage employment. Again, the tables present separate results for the four education groups and weighted procedures are used to calculate the measures.

The results in Tables 2.2 corroborate the expected relationships between education and the characteristics of spells. For example, employment spells are longer and episodes of nonemployment are shorter for the higher education groups. Furthermore, the length of training spells decreases with increases in the level of educational attainment. Finally, individuals from the higher education categories are less likely to experience low-wage employment; however, these low-wage spells are longer in length than the low-wage spells of high-school dropouts.

2.5 Descriptions of Transitions

Tables 2.3 present the sample proportions reflecting the likelihood that individuals follow particular paths when entering the five post-school labor-market activities. Table 2.3-LQ contains the weighted summary statistics for the lowest quintile interpretation of low-wage employment and Table 2.3-M presents the analogous measures using the minimum wage criterion to define a low-wage job. The rows, designated by the term "origin status", refer to the labor-market state from which an individual has just left and the column designation refers to the status an individual has just entered. Thus, within each of the four education groups the columns must add up to one because these entrance probabilities are conditioned upon entering a particular status.

The summary measures in Tables 2.3 help clarify some of the unexpected findings in Table 2.1. First, with regard to the constant incidence of training across education groups, the results in Tables 2.3 suggest that individuals with a higher level of education are much more likely to enter training from an employment status as compared to their less educated counterparts. Second, the last row in Table 2.3-LQ and Table 2.3-M suggests that some of the unexpectedly high rate of participation in low-wage employment by college graduates is the result of their taking a low-wage job immediately after leaving school. Specifically, more than 27 to 33% of all low-wage spells for this education group are the result of an individual moving from status s directly to status ℓ. Finally, one other interesting feature of Tables 2.3 is the routes through which men simultaneously hold both low-wage and high-wage jobs. In particular, it is very rare for someone to move into status b from any status other than the other two employment statuses (i.e., status ℓ and status h).

Tables 2.4-LQ and 2.4-M present the weighted sample proportions measuring the likelihood that individuals with a given level of education follow particular paths when exiting from each of the six labor market activities; s, ℓ, h, b, e, and n. The designations LQ and M associated with these tables represent the lowest quintile and minimum wage definitions of low-wage respectively. In these tables, the origin status refers to the labor-market state which an individual has occupied and just left, and the designation status refers to the state in which an individual enters immediately upon exiting from the origin state. Each of the rows in this table must sum to one because these exit probabilities are conditioned on an individual leaving a particular status.

Casual examination of the statistics in Tables 2.4 reveals several interesting patterns in the exit probabilities. First, the relatively small amount of movement directly from low-wage employment to high-wage employment is somewhat surprising, especially in the higher education categories. For example, the highest probability of moving from a low-wage to a high-wage job occurs for an individual with some college using the LQ definition and still only 34% of all low-wage spells end with the man moving into a high-wage status. Second, as expected, there is more movement from low-wage employment directly to high-wage employment than movement from high-wage to low-wage across all education categories. Third, it is uncommon for men to move from holding both a low-wage and a high-wage job to a status where they are not working at all. Fourth, individuals with more education are more likely to move from training to employment, specifically high-wage employment, than are individuals with less education. Finally, there is substantial movement from nonemployment to low-wage jobs and from low-wage employment to nonemployment. This suggests that it may be difficult to use low-paying jobs as a jumping stone to high-wage employment. The findings upcoming in Section 6 show this suggestion to be misleading.

3. Earnings from Low-Wage Employment

An understanding of the relative importance of low-wage jobs as a source of income to individuals and their households is needed to address the issues raised by the first set of questions in Section 1. Four factors are important determinants of the relative importance of low-wage employment: the extent of individuals' involvement in the low-wage sector; the degree to which individuals hold high-paying jobs at the same time they are employed in a low-wage job; the relative contribution to household income of earnings from low-wage employment; and the time horizon over which one measures the importance of low-wage employment.

A comprehensive analysis of these four factors not only includes a description of how these factors vary across demographic groups, but also involves an examination of the time paths followed by these measures. This analysis considers both of these dimensions. Specifically, to summarize the relationship between demographic characteristics and the importance of low-wage employment, it focuses on describing variation in these factors across age and racial groups within each of the four education categories. In addition, it explores the time paths of the four factors by incorporating time effects that are common across age and racial groups but differ across the educational categories.

3.1 Empirical Framework

Simple regression methods offer an attractive approach for providing summary statistics reflecting the part played by low-wage employment in determining economic mobility. These methods provide a way to decompose various measures of the relative importance of low-paying jobs into age effects and common time components. In particular, let the variable y_{it} denote the ratio of low-wage earnings to some measure of total income corresponding to the i-th individual in period t. Consider the regression equation

$$(3.1) \qquad y_{it} = \sum_{j=0}^{3} \beta_j \, age_{it}^{j} + \sum_{k=1}^{K} \gamma_k d_{kit} + \text{error} ,$$

where the variable "age_{it}" refers to the age of individual i in period t, the variables d_{kit} are year dummies, and βs and γs are parameters. This equation induces a third-order polynomial in age; evaluating the polynomial at a particular age gives the average of y corresponding to that age over the entire period. Imposing the identification condition $\Sigma_k \gamma_k = 0$ implies that the γ_k coefficient represents the common deviation experienced by all ages in period k.

The following analysis estimates a variety of regression models to investigate the four factors that determine the relative importance of low-wage employment. Specifically, we consider two types of dependent variables that capture various dimensions of low-wage employment and different time horizons to uncover the temporary or permanent nature of low-wage employment. The first type of dependent variable only distinguishes whether an individual participates in the low-wage sector at all over a given time horizon and thus captures a very general notion of low-wage employment. More refined notions of low-wage employment are incorporated into the analysis by picking dependent variables that measure the fraction of an individual's income, or his family's income, that arises from employment in low-paying jobs. We consider four distinct time horizons to measure the periods 1...T in the subsequent analysis: (1) all quarters included in the calendar years 1978,...,1987, designated 3m periods (signifying 3 months); (2) all 6-month intervals during the calendar horizon, designated 6m periods; (3) all one-year intervals, denoted 1y periods; and (4) all two-year intervals, designated 2y periods.

We estimate distinct models for each of our four educational categories and within each category we often estimate separate models for the three race-ethnic groups. To examine the time paths of the various dependent variables we simplify the regression model by including only two time dummies in equation (3.1). One time dummy is equal to one if the period of observation begins in the years 1978 to 1983 and is zero otherwise. Similarly, the second time dummy is equal to one if the time interval associated with y_{it} begins in the years 1984 to 1987 and is zero otherwise. This first period is termed the late 70s and early 80s and we refer to the second period as the mid-80s.

3.2 Participation in Low-Wage Employment

Table 3.1-LQ and Table 3.1-M present the participation rates in low-wage labor markets respectively for the two definitions "LQ" and "M" of low-wage employment for each of the four education categories. The tables report weighted least squares estimates of equation (3.1), with y_{it} representing a dummy variable that takes the value of one if individual i receives any earnings from a low-paying job in period t and it takes on a value of zero otherwise. The upper entry in each cell is the fitted value for an individual in the age range specified in the heading of the column, and the three lower entries represent the fitted values from separate regressions for the three race-ethnic groups making up our sample--in the order White, Blacks and Hispanics. The left group of columns reports results for the late 70s and early 80s, and the right group presents averages for the mid-80s.

The results in Tables 3.1-LQ and 3.1-M provide the information necessary to answer the questions posed in Section 1 concerning participation in low-wage labor markets. The main findings implied by the two definitions of low-wage employment are very similar. The following discussion first tries to gain some understanding of the permanence of low-wage employment by comparing the predicted participation rates across different time horizons and age groupings. The discussion then turns to a comparison of participation rates for different ages, racial groups and education categories to uncover how the composition of participants varies across these demographic characteristics.

Within education categories and calendar periods a comparison of the predicted rates in the lower left hand cell with the rates in the upper right hand cell suggests that participation in the low-wage sector is a temporary event for most young men. For example, in Table 3.1-M during the late 70s and early 80s, 75% of teenage high-school graduates hold a low-wage job when considering a 2-year horizon and yet only 11% of this group are employed in the low-wage sector by the time they are in their late 20s if we use a 3-month time horizon. While this example is the most extreme drop in the tables, there is a significant decline in every education category. This picture of short-term participation in the low-wage sector is reinforced by examining the patterns in participation rates across both different ages and time horizons. In particular, as individuals reach their late 20s they are about half as likely to hold a low-paying job as compared to when they were in their late teens; and while one would expect widening the time horizon to lead to greater participation, moving from a 3-month horizon to a 2-year time frame more than doubles the participation rate for most of the age-education categories.

The variation in participation rates across different demographic characteristics are generally consistent with the patterns displayed by the summary statistics presented in Tables 2.1; however, Tables 3.1 point out some interesting interactions among age, race and educational attainment. As noted in Section 2, rates of participation decline with increases in education and yet a surprisingly large fraction of college graduates hold a low-wage job when they are in their early 20s. A closer examination of the results in Tables 3.1 reveals widening educational differences as individuals age. In particular, for men in their late teens the participation rates for high-school dropouts are very similar to the rates for high-school graduates and the some college group; however, for older men the participation rate is higher for the dropouts compared to the other two categories. Focusing on the lower three entries in each cell suggests there is a substantial interaction among the demographic characteristics. At the younger ages there are only slight differences between the participation rates of Whites, Blacks and Hispanics in every educational category. These differences are magnified at the older ages especially for the lower education groups. For example, in Table 3.1-LQ compared to Whites a similar fraction of Black college graduates hold low-wage jobs in their late 20s, while at this same age the participation rate for Blacks in the other educational categories is roughly double the rate for Whites.

In summary, the significant findings revealed in this analysis are:

- **Involvement in low-wage jobs tends to be a short-term phenomena and is more concentrated among young men. Consequently, measurements designed to gauge the extent of low-wage employment depend critically on the time frame used to register participation as well as on the age of individuals.**

- **For high-school dropouts and high-school graduates, participation rates in low-wage employment are large as 59% when registering participation as holding any low-wage job in a 2-year period in the late teens, and it is as small as 11% when participation refers to holding a low-paying job during an arbitrary quarter when individuals are in their late 20s.**

- **Regardless of the age and education of young men, participation in low-paying jobs is twice as likely to occur over a 2-year horizon than in any of the particular quarters making up this horizon.**

- **Irrespective of the time frame used to catalog participation, the**

likelihood of holding low-wage jobs declines with age (by as much as 50%), with the most significant decreases occurring at the earlier ages.

- **As individuals age, education becomes a stronger factor determining the likelihood of holding a low-wage job. While participation rates in low-wage employment steadily decline as individuals acquire educational attainments beyond high school, a surprisingly large fraction of college graduates hold low-wage jobs at the start of their working careers--around 30% in the first 2 years after graduation.**

- **Race-ethnic differences in low-wage participation are relatively minor at young ages, but they tend to widen at older ages especially at lower levels of education. Ignoring college graduates, Blacks tend to have the highest participation rate, with no systematic ordering between Whites and Hispanics.**

3.3 Relative Importance of Earnings from Low-Wage Jobs

Tables 3.2-LQ and 3.2-M present estimates of the relative contribution of earnings from low-wage employment to several sources of household income for the two definitions of low-wage. The tables report weighted least squares estimates of the fitted values implied by equation (3.1) with y_{it} constructed three ways. Calculating y as the ratio of an individual's earnings from low-wage employment over his total labor earnings in the period yields the results reported in the first group of rows listed for each education group. Calculating y as the ratio of an individual's earnings from low-paying jobs over total family nontransfer income in the period produces the estimates reported in the second group of rows listed for each education category. Finally, calculating y as the ratio of an individual's earnings from low-wage employment over total family income in the period yields a set of findings presented in the third group of rows. The upper entry in each cell is the implied fitted value for a nationally representative sample of youths associated with the corresponding age-education category and period measure. The three lower entries present estimates of the percentages of income received from low-wage employment, with separate regressions run for the three race-ethnic groups; the first entry refers to White; the second to Black; and the third to Hispanics.

The results in Tables 3.2-LQ and 3.2-M portray very similar pictures suggesting that low-wage jobs are an important source of income for participants and their families. Further, for some types of individuals it is also a significant income source over long time horizons. Within a given education category-calendar period, a comparison of the upper left hand cell with the lower right hand cell provides a general overview, as well as a range of values, indicating the importance of earnings from low-wage jobs in determining the economic well-being of individuals and their families. As one would expect this diagonal comparison shows a decrease in the importance of low-wage earnings as the width of the time horizon window increases and as broader income measures are considered. For example, in Table 3.2-LQ for the mid-80s using a 3-month time horizon, 88% of a teenage high-school dropout's own labor income comes from employment in the low-wage sector while a dropout in his late 20s derives only 38% of total family income over a 2-year horizon from low-wage jobs. A similar comparison of these same income measures across demographic groups suggests that Black high-school dropouts obtain a significantly larger fraction of income from the low-wage sector over both short and extended periods of time. Specifically, over a 3-month horizon over 85%

of a Black high-school dropout's own labor income is derived from low-paying jobs and more than half (56-69%) of his family income over a 2-year horizon results from his employment in low-wage jobs.

A closer examination of particular income measures provides a more through understanding of the importance of low-wage employment in determining the economic mobility of young men. In particular, examining the total individual labor income measure at different time horizons provides information on the extent to which individuals work in both low-wage and high-wage jobs. For example, using a 3-month time horizon the predicted fraction of own labor income resulting from low-wage employment is generally above 70% for all ages, races and education categories which indicates there is little "simultaneous" employment in both low-wage and high-wage jobs. In contrast, low-wage employment is much less important as the time frame widens to 2 years (e.g., only 25%-60% of own labor income is derived from low-wage employment) suggesting that most low-wage participants are also working in high-wage jobs over this period. Taken together with the results in Tables 3.1, these measures imply that low-wage employment is an important, but temporary, event for most people. There is an exception to this implication for Black and Hispanic men with less than 16 years of education because a significant number of men from this demographic group obtain a significant fraction of own labor income from low-wage employment over longer time horizons.

Comparing the estimation results for the individual labor income measure with the results from the two family income measures provides some insights into the part low-paying jobs play in determining a family's economic circumstances. This comparison across different educational categories suggests that low-wage employment is relatively less important in determining the economic circumstances for the families of men with higher levels of education. For example, in Table 3.2-LQ using a 3-month horizon a typical high-school dropout in the mid-80s who is in his early 20s receives 85% of his own labor income versus 73% of total family income from low-wage employment while a comparable college graduate receives 71% of own labor income and only 54% of total family income from low-paying jobs. Similar comparisons indicate that earnings from low-wage jobs are relatively less important in determining a family's income as men age and longer time horizons are considered. Conducting the same exercise using the lower entries in each cell point out some significant differences in the relative importance of low-wage employment for Whites, Blacks, and Hispanics. In particular, the families of Black men with lower educational levels (i.e., categories 11-, 12 and 13-15) rely more on earnings from low-paying jobs relative to Whites. These racial differences are not as prominent for college graduates.

The principal conclusions drawn from this analysis on the relative importance of earnings from low-wage jobs are as follows:

- **The fraction of income made up by earnings from low-wage jobs falls as one considers longer horizons to accumulate income and broader sources of income. Earnings from low-wage jobs is a relatively high fraction of individuals' total labor income earned during the quarter in which these jobs are held; it is a much smaller fraction of total family income received in the 2-year periods including these quarters.**
- **For high-school dropouts and high-school graduates, earnings from low-**

wage jobs average as much 86% of total labor income during those quarters when such jobs are held; this average drops to as little as 30% when calculating the contribution of these earnings to total family income received over 2-year periods during which low-paying employment takes place. For college graduates, the analogous percentages are 71% and 15%.

- Considering individual's labor income alone, the fraction of earnings coming from low-wage jobs for low-educated participants ranges between 69% and 88% when considering the contribution of these earnings to quarterly labor income; and it ranges between 33% and 61% when considering the contribution to total labor income received over 2-year periods when low-wage employment occurs.

- For poorly educated men who hold low-wage jobs, earnings from these jobs on average account for 65%-80% of total family income received in a quarter, and 40%-50% of family income received over 2 years periods when low-paying jobs are held.

- The contribution of earnings from low-wage jobs to any measure of income over any period declines with age and with higher levels of education. The rate of decline associated with aging is much steeper for the upper education groups.

- At the lower education levels, the fraction of any measure of income made up by earnings from low-wage jobs is typically highest for Blacks, with Hispanics second, and with Whites having the lowest fractions. Race-ethnic differentials are insignificant for college graduates.

4. An Empirical Framework

Understanding the process underlying economic mobility for a population requires extensive information on the patterns of their work experiences from the time of initial entry into the labor force until a distant point in their working careers. If we had detailed longitudinal data on a sample of individuals covering the early portion of their lifetimes, say at least the first ten years after leaving school for each person, then there would be little need to introduce a statistical model to infer the findings developed later in this paper. Given such data, one could readily calculate a variety of statistics summarizing the total amount of time that persons occupy in different labor-market statuses over alternative horizons, along with the various routes followed by individuals to employment paying different wage levels. Unfortunately, such data are never available. Invariably, persons included in a data source are not observed over the same period (in either the life cycle or calendar time); they are typically observed for shorter periods--indeed, substantially shorter in many instances--than the long horizon of interest in this study; and some individuals enter the sample after they have left school, which implies that no detailed information is available on their work histories from the time that they depart school until when they become sample members. These complications severely limit the conclusions that can be drawn from simple summary measures, and they create significant difficulties in any empirical analysis of economic behavior in a dynamic context.

As a conceptual framework for dealing with these issues, the subsequent analysis introduces a generalized variant of a transition probability model (TPM), substantially expanded beyond that found in applications of Markov chains.[6] This model offers a flexible econometric framework for studying economic mobility and movements among labor markets paying different wage rates, as well as movements to and from educational and nonemployment activities. The perspective adopted in the model is to characterize youths' labor-market experiences using age--not calendar time--as the relevant time measure. Our aim is to describe the patterns of experiences that occur over alternative stages of individuals' lifetimes after they leave formal schooling. Interest not only focuses on the cumulative amount of time that persons spend in various activities, it also considers the sequences of these experiences.

The resulting empirical model characterizes six aspects of participation in low-wage labor markets and of earnings mobility in general:

- The probability that a youth will enter low-paying employment over various portions of his lifetime.
- The likelihood of entering or returning to low-wage employment from alternative labor-market statuses.
- The lengths of spells spent in low-wage employment, as well as in employment in high-wage jobs, in nonemployment, in educational activities, and in combinations of these statuses.
- The likelihood that a low-paying employment spell will end with a participant moving to high-wage employment, educational activities or nonemployment.

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[6] For further discussion of elementary variants of Markov chain models, see the textbooks by Bartholomew (1982) and Howard (1971).

- Measures of the total time spent in low-wage employment--or in any other state--over an extended period of time, including the number of spells and the cumulative duration during a specified horizon.
- The way in which experiences vary among individuals possessing different characteristics and labor market histories.

We formulate the TPM to characterize the process governing individuals' mobility on a weekly basis across the five economic statuses defined in Section 2, which include: status ℓ (employment in a low-wage labor market); status h (employment in a high-wage job); status b (simultaneous employment in both a low- and a high-wage job); status e (involvement in some type of training or educational activity); and status n (not working and not participating in educational pursuits). We consider both the LQ (lowest quintile of the hourly wage distribution) and the M ($1 above the minimum wage) definitions of low wages in assigning an individual to state ℓ in a given week, which means that we carry out separate empirical analyses for these two definitions.

The subsequent empirical framework incorporates three basic building blocks: initial probabilities, duration distributions, and entrance probabilities. The initial probabilities summarize the likelihood that individuals start their working career in alternative labor market activities at the time that they leave school. The duration distributions describe the length of spells or the number of weeks that individuals spend uninterrupted in a particular state. The entrance probabilities summarize the likelihood that individuals who terminate a spell enter alternative statuses (i.e., leave via alternative routes). Throughout the analysis we account for potential differences in individual characteristics and the possible effects of history variables on the various statistical relationships. Our statistical model provides a flexible alternative to a competing-risks model, with many features incorporated in our specifications which are not found in empirical applications elsewhere in the literature.

4.1 Probabilities Determining Initial Labor-Market Status

The first element needed to characterize individuals' work experiences over their lifetimes is the specification of the labor-market status that persons enter immediately upon finishing formal schooling. In econometric terminology this component determines the initial conditions of the process describing labor market mobility. The statistical specification needed here is a type of entrance probability, for it reflects the likelihood that an individual enters each of the states ℓ, h, b, e, or n at the end of school. We specify these probabilities as

$$Pr\,(s \rightarrow i) = Pr\,(s \rightarrow i \mid X) \qquad i = \ell, h, b, e, n \tag{4.1}$$

for the probability that a person exits from school (state s) to state i as the first labor-market status at the end of school. Formally, the quantity $Pr\,(s \rightarrow i)$ represents the probability that an individual moves from state s to state i conditional on the covariates X. By incorporating demographic characteristics in X, one can allow for differences in the way in which various segments of the population start their working careers. In the subsequent analysis, X includes variables reflecting schooling attainment, age, and race.

4.2 Duration Distributions and Hazard Rates

The next element required to characterize labor-market experiences is a summary of the length of time that individuals spend in the various statuses upon entry. A duration distribution characterizes the likelihood that an individual experiences a given number of weeks of continuous residence in a particular labor market activity given admission into this status and some specification of history prior to the start of the spell.

According to our formulation, an individual may occupy any one of the five statuses (ℓ, h, b, e, or n) at any given time. Letting "i" designate an arbitrary status, a duration distribution takes the form

$$f_i(\tau) = S_i(\tau - 1)\, H_i(\tau) \quad , \tag{4.2}$$

with

$$H_i(t) = 1 - P_i(t, Z) \tag{4.3}$$

and

$$S_i(\tau - 1) = \prod_{t=1}^{\tau - 1} P_i(t, Z) \quad . \tag{4.4}$$

In these expressions, the variable τ corresponds to the duration of a spell spent in labor-market status i, and Z accounts for factors other than duration that influence the lengths of these spells. The probability $P_i(t,Z)$ designates the likelihood that an individual remains in the current labor-market status after already having been in the state for t weeks, with the covariates Z summarizing the demographic characteristics and previous work history at the start of current episode; $P_i(t,Z)$ conditions on the variables t and Z. The function $f_i(\tau)$ specifies the likelihood that a spell in status i will last exactly τ weeks for individuals falling into a category characterized by attributes Z at the beginning of the spell. The hazard rate $H_i(t)$ determines the fraction of the population who, having been in the labor-market status for $t-1$ weeks, will leave on the *t-th* week of their spell. Finally, the quantity $S_i(\tau-1)$, the survivor function, depicts the probability that an individual will experience an episode in status i that lasts at least $\tau-1$ weeks.

The covariates Z include two distinct components in our analysis: the components X accounting for demographic characteristics; and the variables H summarizing an individual's particular work history experienced prior to the start of the current spell. We consider a wide variety of summary measures in H, including: total employment since leaving school; the amount of employment experienced in the year prior to the initiation of the current spell; an indicator of whether the individual participated in any training since leaving school; the amount of training completed since leaving school; indicators of the low-wage participation in each of the two years preceding the current spell; and indicators of the labor-market status from which the individual exited just prior to entering his current position. Most covariates are interacted with t, the length of the individual's spell in the current labor-market status.

4.3 Entrance Probabilities

The third element needed to characterize labor-market mobility summarizes the likelihood that individuals enter the alternative labor-market statuses upon the termination of a spell. This component of the model determines how different work histories and demographic characteristics influence the prospects of following the various paths available to persons when exits occur from each status under a variety of circumstances.

Upon the conclusion of a spell in state *k*, define the probability that an individual enters state *i* as

$$Pr(k \rightarrow i) \equiv Pr(k \rightarrow i \mid \tau, Z), \qquad i \neq k\ , i = \ell, h, b, e, n\ . \tag{4.5}$$

Formally, the quantity $Pr(k \rightarrow i)$ represents the probability that an individual moves from state *k* to labor-market activity *i* conditional on ending a spell of τ weeks in state *k* and on the covariates *Z* which describe circumstances at the start of the spell that just ended. Incorporating work history variables and demographic characteristics in *Z* allows one to model how the particular nature of each individual's lifetime work experiences influences the prospects for entering a new labor-market status and how these prospects differ across demographic groups.

4.4 Characterizing Employment Experiences

Estimated variants of the preceding statistical specifications provides all the information needed to describe events associated with time spent in low-paying jobs over any horizon, along with the pattern of transitions to and from such employment. Using this knowledge, one can infer a wide array of dimensions associated with low-wage experience, such as: the probability that a youth will enter low-paying employment over various portions of his lifetime; the routes of entry into and exits from low-wage jobs; the number of entries into low-wage employment; the lengths of spells spent in low-wage jobs; and measures of the total time spent in low-wage employment.

The above elements serve as building blocks for several approaches for characterizing employment patterns. While not the most convenient approach, one can analytically calculate the likelihood of any particular employment sequence by forming the appropriate product of initial probabilities, duration distributions and entrance probabilities; such a procedure literally permits one to predict the likelihood that a member of a demographic group will experience any specific pattern of labor market experiences.

To illustrate this procedure, define $f_{ki}(\tau_{ki})$ and $S_{ki}(\tau_{ki}-1)$ as the duration distribution and the survivor function associated with the ith spell experienced by an individual in state k, where $k = \ell, h, b, e$, and n, depending on whether the person occupies a low-wage job, a high-wage job, simultaneous employment in low-wage and high-wage jobs, training positions, or nonemployment. Each f_{ki} and S_{ki} has a form analogous to the corresponding expression listed in (4.2) and (4.4). Similarly, let $Pr(k_i \rightarrow m_j)$ denote the entrance probabilities, linking transition from the ith spell in state k to the jth spell in state m. Relation (4.5) characterizes the form for these probabilities. Multiplying the quantities f, S, and Pr in a way that describes an individual's experience provides the expression for the probability associated with the particular spell sequence corresponding to this experience.

For example, the likelihood that, over a period of T weeks after leaving school, a person starts a spell in low-wage employment lasting $\tau_{\ell 1}$ weeks, moves to nonemployment at that time, and spends the remaining $\tau_{n1} = T - \tau_{\ell i}$ weeks in nonemployment is given by

$$Pr(s \rightarrow \ell_1)\, f_{\ell 1}(\tau_{\ell 1})\, Pr(\ell_1 \rightarrow n_1)\, S_{n1}(\tau_{n1}) \tag{4.6}$$

If, instead, this individual completes the spell in the nonemployment after τ_{n1} weeks prior to the end of the period, enters high wage employment for τ_{h1} weeks, and again enters nonemployment for the remaining τ_{n2} weeks which runs to the end of the period, then the implied probability is

$$Pr(s \rightarrow \ell_1)\, f_{\ell 1}(\tau_{\ell 1})\, Pr(\ell_1 \rightarrow n_1)\, f_{n1}(\tau_{n1})\, Pr(n_1 \rightarrow h_1)\, f_{h1}(\tau_{h1})\, Pr(h_1 \rightarrow n_2)\, S_{n2}(\tau_{n2}), \tag{4.7}$$

where $\tau_{n2} = T - \tau_{\ell 1} - \tau_{n1} - \tau_{h1}$.

The use of analytical methods for calculating summary statistics describing dynamic patterns of labor-market experiences is computationally burdensome. While inferring the likelihood of any particular sequence of experiences is relatively straightforward, it is exceedingly complex to calculate such statistics as the average amount of time that an individual can be expected to participate in a specific activity over fixed horizons.

Simulation methods, of the sort now commonly used in statistics and econometrics, offer a far simpler approach for computing summary statistics designed to characterize labor-market activities. The subsequent analysis utilizes such methods to summarize experiences of the four education groups considered in the previous discussion during horizons covered in the first 10 years of their working careers after leaving school.

5. Empirical Specifications and Estimation

Implementing the empirical framework outlined in Section 4 requires the estimation of three statistical quantities, considered most conveniently in the order: the probabilities $P_i(t,Z)$, which determine the length of spells in labor-market activities; the entrance probabilities $Pr\ (k \rightarrow i)$, which indicate the likelihood of entering alternative statuses at the end of spells: and the initial-status probabilities $Pr\ (s \rightarrow i)$, which designate the likelihood of starting a career in the various labor-market activities after leaving formal schooling. This section introduces the empirical specifications adopted in our empirical analysis for these quantities, along with the procedures implemented to estimate specifications. The discussion outlines estimation results only briefly; Appendix B describes the specifications and results in greater detail, and Section 6 fully characterizes the implications of the empirical findings.

5.1 Parameterization of Duration Distributions and Hazard Rates

Proposing specifications for f_i and H_i requires an appropriate functional form for $P_i(t,Z)$, representing the probability of remaining in state i for one more week beyond duration t given characteristics Z. Three aspects of this functional form are critical to these specifications. The first involves the nature of duration dependence applicable for the various types of work activities, which primarily determines how P varies with t.

The second concerns the effect on P of an individual's previous work experiences, which are included in the covariates Z. The third relates to the possibility that central features of duration dependence change as the values of Z change. To account for such a possibility, we require a formulation for P that admits flexibility both in the functional form for duration dependence, and in the way in which this dependence varies for different values of the covariates Z.

Plotting hazard rates is a popular mode for presenting information about the character of duration dependence. Graphs of hazard rates in our data reveal that empirical specifications of the probabilities $P_i(t,Z)$ must admit nonmonotonic duration dependence and allow the form of this dependence to vary according to the attributes Z. Standard empirical specifications typically do not accommodate nonmonotonic duration dependence, nor do they allow for interaction between the form of duration dependence and covariates Z.

To allow for such flexibility, we specify the following logistic model for the probabilities $P_i(t,Z)$:

$$P_i(Z,t) = \frac{1}{1+e^{Z_1\beta_i+g_i(t,Z_2,\alpha_i)}} , \tag{5.1}$$

where Z_1 and Z_2 are vectors of variables made up of the covariates Z, β_i is a parameter vector, and the function $g_i(t, Z_2, \alpha_i)$ determines the duration properties associated with the time spent in labor market status i.

The covariates Z include demographic characteristics, X, and work-history variables, H, where all of these variables evaluated at the start of the current labor-market episode. The characteristics making up X include: an intercept, indicator variables for racial origin (Black and Hispanic); indicator variables for educational attainment (i.e., representing the groups 11-, 12, 13-15, and 16+); and the natural logarithm of the total number of weeks since the individual left formal schooling--which measures the person's age when this variable is fully interacted with indicators of educational levels, as is done in the subsequent analysis.

The work-history variables H include: the fraction of time spent employed during the 52-week period prior to the initiation of the current spell; an indicator variable signifying whether the individual was employed in a low-wage job for at least 1 week during the year preceding the current spell; an indicator variable signifying whether the individual was employed in a low-wage job for at least 1 week during the two years preceding the current spell; the total number of weeks spent in training programs since leaving school; the proportion spent employed of the total time since leaving school; the product of this proportion and the logarithm of the total number of weeks since the individual left school (i.e., an interaction between the fraction of total employment and the log of potential labor market experience); and a set of 6 indicator variables signifying the economic status occupied by the individual prior to entering the current status--including indicators for school s and for the five labor-market statuses ℓ, h, b, e, and n.

In specification (5.1), the function $g_i(t, Z_2, \alpha_i)$ not only captures the properties of duration dependence, but the presence of Z_2 in g_i also allows duration dependence to vary according to all the attributes included in Z_2. Spline models are an attractive approach for modelling duration effects, since they fit the data with a flexible and smooth function of duration. Implicit in conventional spline models, which fit polynomial functions to a series of intervals over duration, is a tradeoff between smoothness and goodness of fit. Fit can be improved by increasing the number of polynomial functions, but nondifferentiability at the boundaries requires a sacrifice in smoothness. Limiting the number of intervals or the order of the polynomial functions yields a smoother curve but diminishes the capabilities of detecting complicated forms of duration dependence.

In our approach, we specify $g_i(t, Z_2, \alpha_i)$ as the general function:

$$g_i(t, Z_2, \alpha_i) = \sum_{j=1}^{J} \left[\Phi_{ij}(t) - \Phi_{i,j-1}(t) \right] \left[\alpha_{ij0} Z_2 + t\, \alpha_{ij1} \right] \quad . \tag{5.2}$$

The quantity $\Phi_{ij}(t)$ denotes the cumulative distribution function of a normal random variable possessing mean μ_{ij} and variance σ_{ij}^2, and the α_{ikj}'s in (5.2) represent parameter vectors.

The presence of Z_2 in g_i allows duration dependence to vary according to all the attributes included in Z_2. To describe the characteristics of g_i, suppose for the moment that Z_2 only consists of an intercept; so $\alpha_{ijo} Z_2 + t\, \alpha_{ij1} = \alpha_{ijo} + \alpha_{ij1} t$. The presence of the *cdf*'s in (5.2) permits us to incorporate spline features in g so that the linear polynomial $\alpha_{ijo} + \alpha_{ij1} t$ represents g over only a specified range of t. In particular, suppose we wish to set $g_i = \alpha_{i1o} + \alpha_{i11} t$ for values of t between 0 and t^* and to set $g =$

$\alpha_{i20} + \alpha_{i21} t$ for values of t between t^* and some upper bound $\bar{t}$. To create a specification of g that satisfies the property, assign $J = 2$ in (5.2); fix the three means determining the *cdf*'s as $\mu_{i0} = 0$, $\mu_{i1} = t^*$, $\mu_{i2} = \bar{t}$; and pick very small values for the three standard deviations σ_{i0}, σ_{i1}, and σ_{i2}. These choices for the μ's and the σ's imply that the quantity $\Phi_{i1}(t)-\Phi_{i0}(t)=1$ over the range $(0, t^*)$ and $=0$ elsewhere, and the quantity $\Phi_{i2}(t)-\Phi_{i1}(t)=1$ over the range $(t^*, \bar{t})$ and 0 elsewhere. Accordingly, g_i possesses the desired property. Further, $g_i(t, Z_2, \alpha_i)$ is differentiable in t. With the values of the μ_{ij} and the σ_{ij} set in advance of estimation, $g_i(t, Z_2, \alpha_i)$ is strictly linear in the parameters α and in known functions of t and X_2. One can control where each spline or polynomial begins and ends by adjusting the values of the μ's. One can also control how quickly each spline cuts in and out by adjusting the values of the σ's, with higher values providing for a more gradual and smoother transition from one polynomial to the next.

5.2 Estimation of Duration Distributions and Hazard Rates

We estimate parameters of the transition probabilities $P(t,Z)$ appearing in specifications (5.1) and (5.2) by implementing maximum likelihood methods of the sort found in duration analysis to estimate the distribution $f_i(\tau)$. The incorporation of the NLSY supplemental samples into our data set requires the use of weighted maximum likelihood techniques in the estimation of these probabilities. Our sample consists of observations on all spells initiated during our period of observation. We have complete information on the variables included among our work-history covariates H, so we encounter no problems with left censoring. Our procedure accounts for right censoring when spells are interrupted. We estimate distinct models for each of our four educational categories, and our two low-wage definitions.

In estimation, we pick a specification of $g_i(t, Z_2, \alpha_i)$ by setting $J = 5$ in (5.2), with the μ's and σ's fixed according to the particular status analyzed. We selected the values for the μ's and σ's after extensive exploratory data analysis for each type of spell; the properties of the empirical hazard rates principally determine the formulation of the function $g_i(.)$. We allow the form of the duration dependence to vary with all covariates by including all the components of Z listed above in Z_2, with Z_1 eliminated from the specification. The empirical analysis estimates the α coefficients for each of the transition probabilities that determine the five duration distributions.

Following some general guidelines for choosing specifications, we adopted different parameterizations of the transition probabilities across the alternative labor-market statuses and education categories. (Appendix B presents the details of the final specifications for each spell type and education category.) Regarding the nature of duration dependence and the characteristics of the spline functions, the values of the μ's and σ's vary across spell types, but are held constant across education categories.[7] Conventional hypothesis tests indicate that significant interaction effects exist between duration and demographic characteristics and between duration and history variables over some range of weeks for all of the spell types and education categories; thus, we included the components of both X and H as part of the covariates included in Z_2.[8]

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[7] Extensive testing indicates that the null hypothesis of $\alpha_{ijl} = 0$ for combinations or individual values of i and j cannot be rejected at conventional significance levels; thus, the estimated transition probabilities used in the subsequent analysis impose this restriction on the parameters in equation (5.2). Furthermore, after testing, we restrict the $\alpha_{is0} = 0$ in estimation, except for the coefficient on the intercept term in Z_2; thus, the transition probability is constant and does not depend on individual characteristics beyond the last spline point.

5.3 Parameterizations of Entrance Probabilities

The probabilities *Pr (k → i)*, defined by (4.5), determine the likelihood that an individual enters labor-market activity i conditional on ending a spell of τ weeks in status k and on the covariates Z. The way in which the variables τ and Z influence the value of *Pr (k → i)* specifies how various circumstances related to previous work experiences and demographic characteristics affect the route by which individuals exit from labor-market status k. The probabilities *Pr (k → i)* are also likely to display history dependence.

To offer a flexible specification for entrance probabilities, we parameterize these quantities using a multinomial logit specification analogous to the formulation proposed in (5.1), which takes the form:

$$(5.3) \qquad Pr(k \rightarrow i) = \frac{e^{Z_1\beta_{ki} + g_{ki}(\tau, Z_2, \alpha_{ki})}}{\sum_{j=\ell,h,b,e,n} e^{Z_1\beta_{kj} + g_{kj}(\tau, Z_2, \alpha_{kj})}}, \qquad i \neq k, i = \ell, h, b, e, n\ ,$$

where Z_1 and Z_2 are vectors of variables made up of the covariates Z; β_{ki} is a parameter vector; and the function $g_{ki}(\tau, Z_2, \alpha_{ki})$ determines how the likelihood of various entrances changes with the length of the spell that has just terminated.

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[8] To simplify the model, we restrict the coefficients on the variables in Z_2, other than the intercepts, in two ways: first, if none of the coefficients are individually significantly different from zero at conventional significance levels, and a joint hypothesis test indicates that we can accept the hypothesis that all of the parameters in a spline are equal to zero, then we impose these zero restrictions; and, second, we constrain the coefficients to be equal across spline points whenever a joint hypothesis test indicates this is a valid restriction.

The covariates Z include the same demographic characteristics and work history variables listed in Section 5.1, in addition to an indicator variable in H signifying whether any training took place before the current spell.

The form that we specify for the function $g_{ki}(\tau, Z_2, \alpha_{ki})$ in model (5.3) allows covariates to interact with the duration of the previous spell, thus controlling for history dependence. We parameterize $g_{ki}(.)$ similarly to the overlap-spline function $g_i(.)$ specified in (5.2); the quantities $\Phi_{ij}(\tau)$ in this formulation represent the cumulative normal distribution function, as before, and τ is the spell length of the previous spell. If $\sigma_{ij} = 0$ for all i and j, the model can be interpreted as interacting a series of dummy variables in duration with the covariates in Z_2, where the values of the μ_{ij} terms determine the range over which the dummy variables apply. In this specification, the Z_2 variables can have different effects as duration changes for the spell just ended. For example, the model could detect relatively high tendency for individuals who have short spells to enter a particular status. This phenomenon would be reflected in the α parameters. Our overlap-spline specification allows for the effect of the dummy variables to change gradually with time, according to the properties of the cumulative distribution functions, $\Phi_{ij}(\tau)$.

5.4 Estimation of Entrance Probabilities

The parameters of the entrance probabilities are estimated by weighted maximum likelihood techniques using the multinomial logit specification appearing in equation (5.3). As with the duration specifications, weighted procedures are required to account for the nonrepresentative sample design. Distinct specifications are estimated for each of the four educational categories and each of the five labor market statuses. Our estimation sample consists of all observations on completed spells.

We adopt a parameterization of the entrance probability in equation (5.3) that includes the history variables H in Z_1 and specifies $g_{ki}(\tau, Z_2, \alpha_{ki})$ as a function of the length of the current spell with Z_2 including indicator variables for race-ethnic groups. The covariates Z_1 incorporate nonlinear functions of the logarithm of the total number of weeks since the individual left school, the two dummy variables for previous low-wage employment, the six indicator variables for the preceding economic status, both the short-term and long-term measures of the fraction of time spent in employment, the total number of weeks spent in training programs and the indicator variable for any training since he left school--all measured at the time the individual started the labor market episode that he is just leaving.

The formulation of the function $g_{ki}()$ used in the estimation sets $J = 2$ and picks the μ's and σ's according to the specific status analyzed. Inclusion of race-ethnic dummies in Z_2 in $g_{ki}()$ means that the length of just completed spells in status k influence the likelihood of entering the alternative labor-market statuses differently for Whites, Blacks, and Hispanics. The empirical analysis estimates the β and α coefficients that determine the four entrance probabilities for each of the five labor market statuses.

5.5 Parameterizations of Initial-Status Probabilities

The empirical formulation introduced above for the entrance probabilities is a natural candidate for specifying the *Pr (s → i)*, for these probabilities also measure the likelihood of entrances into the various labor-market statuses at the start of an individual's work career upon the completion of school. The nature of these initial-status probabilities rules out the possibility that they depend on any work-history variables; and, thus, the specification of the probabilities in equation (5.4) depends exclusively upon the demographic characteristics X.

We parameterize these probabilities using a multinomial logit specification. Empirical formulations take the form:

$$Pr(s \rightarrow i) = \frac{e^{X\beta_{si}}}{\sum_{j=\ell,h,b,e,n} e^{X\beta_{sj}}}, \qquad i = \ell, h, b, e, n \;. \tag{5.4}$$

The covariates *X* include the demographic characteristics: age and race.

5.6 Estimation of Initial-Status Probabilities

We implement maximum likelihood techniques to estimate the parameters of specifications (5.4), using weighted procedures to account for sample design. In this step of the empirical analysis, there is a single observation for every young man making up our sample because the selection criterion requires the individual to leave school during the observation period. To admit flexible specifications, we estimate different models for each of the four educational categories.

In the specification of the covariates, X in (5.4) includes: the race-ethnic dummies; and several terms designed to allow for a flexible formulation for the way in which age influences entrances into the alternative labor-market statuses. We construct these terms by incorporating components of a variant of the function $g(t, Z_2, \alpha)$ specified in (5.2) as elements of X, with the argument "t" defined as the age of the man (measured in months) when he exits from formal schooling. The parameterization of $g()$ used in the empirical analysis sets $J = 2$ in equation (5.4), with the μ's and σ's in the functions Φ_{ij} differing across the four educational groupings and with Z_2 containing nothing more than an intercept.

6. Characterizing Labor Market Experiences and Mobility

Estimation of our statistical model formally provides direct evidence only on the short-term relationships linking the five economic statuses of low-wage employment, high-wage employment, simultaneous low-wage high-wage employment, nonemployment and educational pursuits. Transition and entrance probabilities indicate the likelihood that a period in one status is immediately followed by a period in the same or in another status. These probabilities do not directly indicate how a spell in, say, low-wage employment influences the career path of an individual. One can, however, uncover the long-term relationships between occupancy in such an employment status and a youth's future earnings prospects by implementing a straightforward simulation exercise. This simulation captures the accumulative and interaction effects implied by particular specifications of the transition and entrance probabilities that characterize a transition probability model.

To formulate the comprehensive picture of economic mobility implied by our empirical findings, we carry out several simulation analyses under a variety of scenarios. This collection of simulations allows us to calculate summary statistics illustrating the long-term relationships among different labor-market statuses during the initial years of young men's working careers after leaving school. We exploit this information not only to summarize the cumulative labor-market experiences of this population (i.e., the total amounts of time that individuals spend in various labor-market activities), but also to characterize the dynamic patterns of movements between labor-market statuses and the extent of economic mobility during the first 10 years after school. We carry out distinct simulation exercises for the four education categories, with results presented separately in each category for the three race-ethnic groups.

This section develops our characterization of the role that low-wage employment plays in the process of economic mobility in five steps taken up in Sections 6.2-6.6, respectively. To further our understanding of who participates in low-wage labor markets, the extent of this participation, and the links between this participation and the amount of time spent in other labor-market statuses, Section 6.2 examines the distribution of cumulative labor-market experiences in the five statuses and combinations of these statuses. While the measures presented in Section 6.2 greatly improve our knowledge about the role of low-paying jobs, cumulative summaries of this sort provide only limited information about the dynamic process generating these early labor-market experiences. Sections 6.3 and 6.4 fill in some of the dynamic features of this process by looking at the number of spells in all five labor-market statuses along with the durations of individual spells. Still another aspect of the picture concerns how long it takes youths to enter high-paying employment given involvement in various labor-market activities. Section 6.5 investigates this dynamic facet by summarizing several measures associated with the length of time that it takes individuals to enter high-paying jobs from the time when: they initially leave school; they start a low-wage job; and they become involved in some form of training. Finally, to complete our characterization, Section 6.6 explores the role that specific labor-market histories play in determining future employment activities. Before discussing our first step in the analysis which is the subject of Section 6.2, we briefly describe our simulation approach.

6.1 Simulating Employment Experiences

Simulation methods, commonly used in both statistics and econometrics, produce the information needed to describe the long-term relationships among the economic statuses examined in our TPM. Implementing a simulation of our empirical model involves generating sequences of Monte Carlo trials using our estimated transition and entrance probabilities to mimic the process governing young men's experiences over the initial years of their working careers. We carry out such an exercise by assigning sequences of discrete variables indicating a person's status in each week by comparing the values of independently-drawn uniformly-distributed variables to the predicted values of the probabilities relevant in determining the discrete variable in the week under consideration. The initial-status probabilities $Pr(s \rightarrow i)$ (relations (4.1) and (5.4)) are the relevant quantities for assigning the values of the discrete variables at the very beginning of the working career when formal schooling ends; the transition probabilities $P_i(t,Z)$ or the hazard rates $H_i(\tau)$ (relations (4.3) and (5.1))) are relevant for assigning outcomes while a spell in labor-market activity i is in progress; and the entrance probabilities $Pr(k \rightarrow i)$ (relations (4.5) and (5.3)) are the relevant numbers for assignment when a spell ends. The analysis calculates the predicted values for these probabilities using parameter estimates obtained in the empirical analysis outlined in the previous section. The variables used in the simulation include: demographic covariates (*X*) that are chosen at the beginning of a simulation exercise and held constant over the sequence of weeks; labor market history variables (*H*) that are updated at the beginning of each new spell in a status to reflect the simulated experiences up to the relevant week; and, the length of the simulated spell that is in progress or just completed. Evaluating these probabilities in every week over the 10-year period following the completion of formal schooling allows one to assign a sequence of labor-market activities experienced by a typical individual during the early years of his life cycle.

Repeating the above procedure numerous times and recording sequences of weekly experiences for a large number of hypothetical individuals provides the basis for characterizing the distribution of the labor market activities experienced by young men with a given set of demographic traits.[1] Examining the labor-market experiences of men with different racial backgrounds and levels of educational attainment over various sequences of simulated weekly statuses produces a comprehensive picture of cumulative labor-market experiences. In addition, with suitable adjustments in the values of the covariates, one can implement the same procedure to simulate labor-market experiences of individuals with a variety of labor-market histories as well as different demographic traits.

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[1] The findings discussed below are based on random draws of 1,000 hypothetical individuals for each demographic group.

6.2 Cumulative Experiences

Summarizing the cumulative amount of time men occupy various economic statuses during the initial years of their labor-market experiences provides a valuable foundation for constructing a comprehensive picture of low-wage employment and economic mobility. Tables 6.1-LQ, 6.1-M, 6.2-LQ and 6.2-M present summary statistics from the simulations describing the cumulative amount of weeks that individuals spend in the five labor-market statuses and combinations of these statuses over various horizons of the 10-year interval after leaving school. The designations "LQ" and "M" indicate the definition of low-wage employment assumed in the computations presented in the corresponding table. The top half of Tables 6.1 report averages of the total number of weeks spent in the different labor-market activities, with results for the entire 10-year period listed in the first set of columns, for the first 5 years of the period (i.e., years 1-5) in the second set of columns, and for the second 5 years (i.e., years 6-10) in the third set. Each cell reports results for Whites, Blacks, and Hispanics, respectively, for the education group designated at the left of the corresponding row. The bottom half of the tables lists the participation rates in the five statuses over the 10-year period, along with the two 5-year horizons making up this period.[2] These participation rates reflect the probability an individual experiences at least one week in the corresponding status during the relevant time period.

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[2] In the case of college graduates, the 6-10 year subperiod of the 10-year horizon is out of sample for the data set used in estimation. The vast majority of our observations making up the college sample are in the first five years after leaving school. Only a few of our college graduates make it into the 6-10 year period and no one makes it past 8 years. We report results for the 6-10 year sample mainly for the purpose of making the college sample comparable to the other education groups. All the other education groups have sufficient data in both the first and second half of the 10-year horizon.

Tables 6.2 present the 10th, 25th, 50th, 75th, and 90th percentiles for the simulated distributions of the cumulative number of weeks spent in the various labor-market statuses and a combination of these activities. The specific combination we consider sums the total weeks spent in low-wage employment and nonemployment to assess the extent to which individuals spend time in a "secondary" labor market status. The results for this secondary labor market status are in the last set of rows in the tables. As in previous tables, each cell lists results for Whites, Blacks, and Hispanics, respectively, for the education group designated in the row. In addition to the percentiles over the entire 10-year period, which are summarized in the first six sets of rows, the two lower groups present the percentiles for the cumulative weeks associated with the first and the second 5 years, respectively.

The subsequent discussion focuses on the LQ definition of low-wage employment. The main conclusions drawn from our analysis do not change when considering the minimum-wage definition. Thus, to avoid diverting the discussion away from the development of a complete picture of cumulative experiences we do not consider the results for cumulative experience based on the M concept of low-paying employment until after discussing the LQ results in their entirety. We then highlight the relatively subtle differences in the findings implied by the LQ and the M definition.

6.2.1 Low-Wage Employment and Nonemployment

For the LQ definition, the findings in Tables 6.1-LQ and 6.2-LQ reveal several interesting patterns in the labor market experiences of youths. Starting with involvement in low-wage employment, the top portion of Table 6.1-LQ shows the average number of weeks that individuals spend in low-paying jobs. The averages reported in Table 6.1 generally indicate that the typical member of any education group spends relatively little time in low-wage employment, from 5% to 20% of the 10-year period. The time spent by college graduates is higher than might be expected, but the averages for the lowest education group are surprisingly low. Specifically, the results show that high-school dropouts spend an average of slightly over one year (i.e. 67-77 weeks) in low-paying employment over the 10-year period. High-school graduates spend approximately from 1.5 to 2 years on average in low-paying employment (i.e. 75-96 weeks). Those in the some-college group experience about .75 of a year in low-paying jobs (i.e. 37-40 weeks); and college graduates experience around .5 of a year on average in low-paying jobs (23-25 weeks).

The bottom portion of Table 6.1-LQ shows that the likelihood of holding a low-wage job at some time during the 10-year period is approximately 75-80% for high-school dropouts and graduates, about 45-50% for those individuals with some college, and approximately 40-45% for those who are college graduates. With the exception of high-school dropouts, participation in low-paying jobs generally diminishes for higher levels of education and for older workers (where older refers to experiences in the second half of the 10-year period); both the average number of weeks and the participation rates fall for persons with higher educational attainments and for individuals in the 6-10 year portion of the period after leaving school.

In the case of high-school dropouts, the participation rate remains about the same in years 1-5 and 6-10, and the average number of weeks spent in low-paying jobs is typically higher in the second half of the 10-year period after departing from formal schooling. Whereas White high-school dropouts tend to experience a slight 3-week decline in average weeks of low-wage participation in the second five years of the 10-year horizon, both Blacks and Hispanic high-school dropouts tend to experience more low-wage employment in the second 5-year period.

The percentiles reported in Table 6.2-LQ for low-wage employment support the conclusions drawn from Table 6.1-LQ. These findings indicate that the amount of time spent in low-paying jobs is not very high for the vast majority of individuals in every education group. The 90th percentile barely exceeds 4 years for any education group. For high-school graduates and beyond, low-wage employment declines monotonically for higher levels of education, and it is lower for the older workers in the upper educational categories. Surprisingly, high-school dropouts typically experience less low-wage employment than their high-school graduate counterparts over the 10 years. While the median for dropouts is lower for older workers (i.e., the second half of the 10-year period), the 75th and the 90th percentiles are not lower for older workers.

Looking at the distribution of experiences in nonemployment reveals that the smaller amount of low-wage employment for dropouts than for high-school graduates arises because dropouts spend a considerable number of weeks in nonemployment--not in training or high-paying employment. The percentiles presented in Table 6.2-LQ for the labor market status designated low-wage+nonemployment shows that dropouts spend many more weeks in either low-paying jobs or nonemployment in the 10-year period than high-school graduates in the same race-ethnic group. Comparing results for this combined labor-market status across education groups discloses that the number of weeks spent in low-wage jobs and nonemployment decreases monotonically with higher education, except for the two upper education groups which are roughly comparable.

Careful inspection of the results for the combined category low-wage+nonemployment for dropouts indicates that race-ethnic groups differ substantially in terms of their experiences, especially when considering Blacks. More than 50% of Blacks spend more than 6.5 years in the combined state of $\ell + n$ over the 10-year period, and 10% spend more than nine years. While the typical Black--as measured by the median values--experiences less in this state in the second five years of the 10-year horizon, there is no improvement for the worst 25% of experiences; the 75th percentile in years 1-5 is 232 weeks, and it is 217 weeks in years 6-10.[3]

While the experiences of Black high-school dropouts are especially dismal, the analysis predicts that many White and Hispanic dropouts also spend a great deal of time in low-wage jobs or out of work. About 50% of the Hispanics spend about half of the 10-year period in the combined status of $\ell+n$; and 10% of Hispanics participate almost nine years in these labor market statuses. Whites fare better than Blacks or Hispanics, and yet 10% of them spend about 7.5 years or more in low-wage jobs or out of work.

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[3] Of course, the individuals involved in the highest 25% of experiences in years 1-5 are not necessarily the same people included in the group with the highest 25% of experiences in years 6-10.

Differentials among the race-ethnic groups in the total amount of time spent in low-paying jobs or out of work over the 10-year period steadily diminish when considering higher levels of education, with the differentials disappearing for college graduates. Blacks continue to stand out as the disadvantaged group among high-school graduates, although their position relative to their White and Hispanic counterparts does not come close to the differentials seen in the case of high-school dropouts. The number of weeks spent in low-paying jobs for White and Hispanic high-school graduates are very similar over the 10-year horizon. Whites and Hispanics also have similar nonemployment experiences, except in the tails of the distribution represented by the 75th and 90th percentiles where a differential exists favoring the Whites. Inspection of the results in the lower parts of Table 6.2-LQ indicates that most of this differential occurs in the first half of the 10-year period. The patterns observed for race-ethnic groups in the case of high-school graduates continue to apply when considering those individuals in the some-college category.

6.2.2 High-Wage Employment and Training

The findings of Tables 6.1-LQ and 6.2-LQ for high-wage employment show that the amount of this type of employment increases monotonically with higher levels of education, with experiences similar in the two upper groups. Blacks fare less well than either Whites or Hispanics in the three lower education categories, with the differential inversely linked to education and widening to an enormous margin for high-school dropouts. Whites and Hispanics have similar experiences in the some-college category and in the upper percentiles associated with lower educational attainments. Whites have more high-wage experience than Hispanics in the lower percentiles of education levels below some college. The favorable position of Whites in the bottom percentiles of those lower education levels in part reflects the favorable margin attained by Hispanics over Whites in the upper percentiles of low-wage employment, which indicates some substitution of low-paying jobs for high-wage employment by this segment of Hispanics. For college graduates, the typical experiences are essentially the same across the three demographic groups. To the extent that a differential exists, it favors the Blacks at the lower percentiles, which is in sharp contrast to the order operative for the lower education groups.

The results in Tables 6.1-LQ and 6.2-LQ relating to the number of weeks spent in both low- and high-wage employment show that the phenomenon of simultaneous job holding at low- and high-wage positions is not uncommon and does not differ much across educational attainments. The participation rates in the lower portions of Table 6.1-LQ reveal that about one-third of individuals will hold a low-wage and a high-wage job during the same week at some time during the 10-year period, and the averages in the upper part of this table indicate that individuals spend approximately 1-4 months in this type of employment over a 10-year horizon. While simultaneous job holding is not rare, the upper percentiles indicate that only 10% of any education group experience 6 months or more in this category of employment. Furthermore, there is no systematic pattern in this type of employment across race-ethnic groups.

Regardless of the education group considered, the average number of weeks spent in training over the 10-year period after leaving school is not small. It ranges from 18 to 59 weeks. The participation rates reported in the lower portion of the Table 6.1-LQ reveal that individuals from any education group have around a 50-60% chance of participating in training at some time over the 10-year period. Training is no more likely to occur in the first 5 years after leaving formal schooling, and there is no systematic patterns in the amount of training across education groups. These conclusions continue to hold after examining the percentiles reported in Table 6.2-LQ. Recall that training in this analysis refers to a variety of activities, including apprenticeships, on-the-job training while working, returning to formal schooling after dropping out, and vocational training. No doubt, this composition varies considerably across the education groups.

6.2.3 Differences in Findings Based on LQ and M Definitions

A casual comparison of the results in Tables 6.1 and 6.2 for the LQ and the M definitions indicates a remarkable similarity in the summary statistics. The numbers reported for average cumulative weeks reported in Table 6.1-LQ are quite close to those presented in Table 6.1-M, and the participation rates reported in the bottom of these tables are virtually identical.

A detailed examination of Tables 6.2-LQ and 6.2-M indicates that the differences in the findings implied by the two definitions of low-wage employment can be summarized quite succinctly. A comparison of the percentiles for low-wage spells reveals slightly longer amounts of time spent in low-wage jobs using the M definition for all education groups. Most percentiles increase by only a few weeks over their counterparts based on the LQ definition, with a few moving as much as 20 weeks. Not surprisingly, the ordering is reversed when considering time spent in high-wage jobs. Cumulative experience in this type of employment is shorter using the M definition. Once again, in most instances the percentiles based on the LQ and M definitions are different by only a few weeks, with the maximum divergence being only about 15 weeks. The experience in "both" employment tends to be longer using the M definition, but there is no systematic ranking of the differences between the M and the LQ percentiles. The amount of time predicted in training over the 10 years differs for the two concepts of low-wage employment, but these differences are marginal, and there is no change in the patterns across either education or race-ethnic groups. The predictions of the amount of time spent in nonemployment based on the LQ and the M definition are essentially identical, which primarily reflects the fact that this state is defined the same way under the two definitions. Cumulative experience in the combined state of low-wage+nonemployment is predicted to be higher using the M definition, with the margins comparable to those noted above for purely low-wage employment. An important point to observe in comparing the cumulative experience in low-wage+nonemployment is that only the lower percentiles are different in the case of high-school dropouts (i.e., the 50th percentiles and below). All of the percentiles are higher for the three upper education groups under the M definition, but the lower percentiles are the most affected for the lower education groups, and the upper percentiles are the most affected for the higher education levels.

6.2.4 Summary of Findings for Cumulative Experiences

The results in Tables 6.1 and 6.2 lead to the following conclusions:

- **Young men spend relatively little time in low-wage employment in the first 10-year period after leaving school. High-school graduates experience the largest amount of involvement in low-wage jobs, followed by high-school dropouts, with persons possessing educational attainments above high school having considerably less experience. While high-school dropouts and graduates have a 75%-80% chance of holding a low-wage job at sometime during the 10-year period, they average a modest 1-2 years of low-wage employment in this period; the majority spends less than one year; and only 10% spend more than 4 years in low-paying jobs. The participation rate of college graduates in the low-wage sector in the first 5 years after school is a surprisingly high 30%, but the average amount of time in low-wage jobs for this group is only about 3 months over this period.**

- **The combined state of low-paying employment and nonemployment provides a more relevant notion of labor-market status than time spent in low-paying employment alone for judging the prospects of individuals during the initial stages of their working careers. The larger amount of low-wage employment for high-school graduates relative to dropouts reflects the fact that a significant segment of the dropout population spends a considerable amount of time in nonemployment--not in training or high-**

65

paying employment. The extent of participation in the state of low-wage+nonemployment decreases sharply for higher levels of education and for older workers.

- Black high-school dropouts spend an exceptionally large amount of time in the combined state of low-paying employment and nonemployment; the prospects for some White and Hispanic dropouts are not much better. More than 50% of the Blacks spend more than 6.5 years in low-paying jobs or out of work during the first 10 years after school; and 10% spend more than 9 years. About 50% of Hispanics spend around half of the 10-year period in low-wage employment or out of work; and 10% participate almost 9 years in these statuses. White dropouts fare better than Blacks and Hispanics, and yet 10% of Whites spend about 7.5 years or more in low-wage jobs or out of work.

- Not surprisingly, the amount of high-wage employment is greater for higher levels of education, and the amount of nonemployment is smaller. The average amount of time spent out of work in the 10 years after school for high-school dropouts ranges from 2.5 years for Whites to almost 5 years for Blacks. These averages fall to less than a year for those individuals with educational attainments above high school.

- Simultaneous job-holding of low- and high-wage positions is not uncommon and does not differ much across education groups, but only 10% of any group experience 6 months or more in this category of employment. Anywhere from 15%-30% of any education group hold a low-wage and a high-wage job during the same week at some time during the 10 years following school.

- The average number of weeks spent in training during the 10-year period following school falls in the range of 18-59 weeks, with individuals from any education group having around a 50%-60% chance of participating in some form of training at least once in the period.

- For all categories of labor-market experiences, race-ethnic differentials steadily diminish with higher levels of education. The differences become negligible for college graduates.

- The evidence supports the familiar concept of life-cycle wage growth, which implies more employment and higher wages as individuals age and accumulate labor-market experience. Not only is there generally more employment in the second 5 years of the 10-year period following school,

but a greater amount of this employment takes place in high-paying jobs. These effects diminish with higher levels of education.

6.3 Numbers of Episodes

The above findings on the cumulative amount of time spent in the various labor-market activities tell us who the primary participants are in low-wage labor markets, but they tell us little about the process involved in producing these experiences. Are participants in the low-wage sector there because they enter the sector many times, staying for short periods each time, or do they enter the sector only a few times and stay long periods? In the next step of our analysis, we address part of this question in this section by looking at the number of spells in each of the five labor-market statuses. We address the remainder of this question in the next section where we describe spell durations.

Tables 6.3-LQ and 6.3-M report percentiles for the number of spells that occur in the five labor-market statuses. These tables are organized analogously to Tables 6.2 with results first presented for the entire 10-year period after men leave school followed by measures for the two 5-year periods making up this horizon. The three divisions in these tables are constructed in the same way except for one important difference in the part describing the number of spells in the second 5-year period. Specifically, this table only counts spells that begin in the second 5-year period and does not include spells in progress at the start of this period. For instance, consider the number of high-wage employment spells in the second 5-year period for college graduates. The zero entries in the table at the 10th and 25th percentile do not imply that 25% of this group did not hold a high-wage job, but, instead reflect the fact that a significant proportion of this population holds a high-paying job throughout most of the 10-year period.

Examination of Table 6.3-LQ shows a smooth pattern across education groups in the number of spells experienced in the various labor market activities. The medians for low-wage spells indicate that two spells is typical for high-school dropouts and graduates; one is common for those with some college; zero is typical for college graduates. Very few individuals experience many spells in low-wage jobs; only 10% of the high-school dropouts or graduates experience more than 4 entries into low-paying employment during the 10 years after leaving school. The typical number of high-wage spells is four over the 10-year horizon for all education groups. The representative person from any education group experiences one training spell over the 10-year horizon, and no spells of holding both a low-wage and a high-wage job at the same time. The lower education groups have more nonemployment spells than the higher education groups, with the number falling from 5 as typical for high-school dropouts to 2 as typical for college graduates.

A comparison of the results across race-ethnic groups shows no substantive difference in the distribution of the number of spells over the 10-year period for any education group other than high-school dropouts. Even for this group, the differentials are quite small and only occur in the tails of the distribution for high-wage and nonemployment episodes. In the light of the differentials noted in the previous discussion, it is not surprising to see that Blacks are the disadvantaged group in the sense that they have fewer high-wage spells.

Inspection of Table 6.3-M indicates that the patterns observed for the lowest-quintile definition of low-wage employment are duplicated in the minimum-wage definition. Not only is the relationship of the distributions similar across race-ethnic and education groups, the number of spells is almost identical for this definition of low-wage employment.

Summarizing the results of Tables 6.3 as they apply to participation in low-wage employment, the basic findings are:

- **Individuals typically experience very few entries into low-paying employment during the first 10 years after leaving school. Even for the lowest education groups, only 50% of individuals start low-paying jobs 2 times or more during the 10-year period; only 10% start such jobs more than 4 times.**

6.4 Lengths of Episodes

To further our understanding of the dynamic process involved in labor-market mobility, this section investigates the duration of spells in each of the five labor-market statuses. Tables 6.4-LQ and 6.4-M, structured similarly to Tables 6.3, list the percentiles describing the length of spells associated with the various labor-market statuses over the 10-year horizon. Starting with the results from the lowest-quintile definition, the findings show a simple pattern in spell lengths across education groups. Employment spells, regardless of whether they are in low- or high-wage jobs, tend to be longer for individuals with higher levels of education with practically no difference for

69

the two upper education groups. Typical employment episodes last from about 5 months for low-wage jobs for high-school dropouts to around 12-20 months for high-wage jobs for college graduates. Training spells tend to be shorter for higher levels of educational attainment; typical spells last in the range of 6-9 months for high-school dropouts and less than 3 months for college graduates. There is no clear pattern in the lengths of nonemployment spells across education groups. Most nonemployment spells are completed well under 4-6 months; and 10% last longer than 12 months.

The duration of spells in low-wage employment is surprisingly short. Typical spells last less than three quarters of a year, regardless of educational attainment. Even at the extremes, 90% of the spells are completed well within 2 years. For high-school dropouts, 90% of the low-wage spells are finished before 1.5 years. These findings do not support the notion of a "trap" that invokes long periods of low-paying employment.

The race-ethnic differentials primarily show up in the lengths of nonemployment spells, most notably for the upper percentiles. For educational attainments other than college graduates, Blacks spend the longest time in nonemployment spells. The differential for Blacks widens for the lower levels of education and the upper percentiles. For high-school dropouts, the 90th percentile for Blacks is almost three years compared to only one year for Whites. Hispanics experience nonemployment spells that are about 50% longer than Whites in the high-school dropout category, but the differential shrinks when considering higher levels of educational attainment.

Race-ethnic differentials in the lengths of employment spells are not systematically linked across educational attainments. For high-school dropouts the typical spell length in low- or high-wage employment are not much different across Whites, Blacks and Hispanics. However, Blacks and Hispanics are more likely to experience longer spells in low-wage employment (see the 90th percentiles). At the same time, they are also more likely to spend longer spells in high-wage employment, with the Blacks outpacing the Hispanics. For the some-college and college-graduate categories, Hispanics experience longer employment spells in both low- and high-wage jobs. Whites and Blacks are roughly comparable for durations in low-wage jobs in these two education categories. For high-wage employment, the durations are longer at the extremes for Whites than for Blacks in the some-college category; and they are roughly comparable or shorter in the college-graduate group.

Comparing these findings with the results reported in Table 6.4-M, the basic patterns identified for the lowest-quintile definition of employment continue to hold for the minimum-wage definition. Not surprisingly, the percentiles for the training and nonemployment spells are very similar in the two tables reflecting the fact that these two activities are defined the same way using the LQ and M definitions. The medians for low- and high-wage spells in Tables 6.4-LQ and 6.4-M are similar. For high-school dropouts the main effect of switching from the LQ to the M definition is to lengthen the duration of high-wage spells at the extremes, with the lengths of low-wage spells unaltered. The same is true for high-school graduates and for those with some college. For college graduates, the shift from the LQ to the M definition systematically lengthens high-wage spells but leads to no systematic shifts in the lengths of low-wage spells.

The conclusions drawn above for the LQ definition concerning race-ethnic differentials broadly hold up when considering the minimum-wage concept. The rankings among race-ethnic groups are unaltered for the two lower education groups. For the some-college group, Hispanics no longer stand out as having longer spells in low-wage jobs than Whites or Blacks, but Hispanics continue to experience the longer spells for high-wage jobs. For college graduates, Blacks show up more as having shorter spells in low-wage jobs; Whites and Hispanics experience more similar durations in low-paying employment than appears using the LQ definition. Considering durations in high-wage employment for college graduates, the differentials widen in favor of Hispanics and Blacks when compared to the LQ definition, with Hispanics continuing to enjoy the longest spells in high-wage employment

Summarizing the findings in Tables 6.5 in terms of their implications for participation in low-paying jobs, the major findings are as follows:

- **The durations of spells in low-wage employment are surprisingly short. Typical spells last for less than 5 months for the high-school dropouts, and around 6 months for high-school graduates and beyond; 90% of all spells are completed well within 2 years.**

- **High-wage employment spells last longer than those in low-wage jobs, with typical spells increasing from 7 months for high-school dropouts to around 12-18 months for those with educations beyond high school.**

- **The race-ethnic differentials primarily show up in the length of nonemployment spells (most notably for the longest durations) and not for the length of spells in low-wage employment. Black high-school dropouts spend the longest time in nonemployment spells with 50% of their spells lasting longer than 6 months--more than double that of Whites; the**

differential narrows steadily for higher levels of education until it vanishes for college graduates.

6.5 Durations To and From Participation in Low-Wage Jobs

The results summarized above portray a general picture of the role low-paying jobs play in the process of economic mobility; however, several significant features of this role still remain unexplored. One important issue is whether the long durations in the combined state of low-wage employment plus nonemployment occur because individuals take a long time to get their first jobs, or because they continually enter and re-enter the low-wage sector with long stays in nonemployment. A second issue is how long it takes to enter high-wage employment once an individual starts a low-wage job. A third issue concerns the likelihood that individuals enter a low-wage job after finding high-paying employment. Finally, a fourth issue is how training fits into the picture of mobility out of low-paying jobs. This section addresses these issues by examining a variety of duration measures designed to relate sequences of labor-market experiences.

Tables 6.5-LQ and 6.5-M present summary statistics describing several measures of duration associated with entering first jobs, with entering low-wage jobs under a variety of scenarios, and with eventually participating in a specific labor-market activity after the initiation of a spell in low-wage employment.

6.5.1 Durations Until First Jobs

The top two groups of rows report statistics corresponding to the durations until individuals enter their first job, distinguishing whether this first job is in low-wage or high-wage employment. The results summarize findings for the four education categories and the three race-ethnic groups. The first set of columns give the fraction of the population experiencing each first-job classification. The second set of columns present the fraction of the population who immediately enter employment upon leaving school, and the remaining columns give the percentiles of the duration distributions for those persons who do not enter employment immediately.

According to the results in Table 6.5-LQ relying on the lowest quintile definition of low-wage employment, around 50-60% of high-school dropouts start employment in high-wage jobs. This percentage rises steadily for upper education levels, reaching the value of around 85% or above for college graduates. Durations until first employment generally decline with education, except for the two upper education groups which are not systematically ranked. The vast majority of young men in those education groups other than dropouts find their first jobs shortly after leaving school. Keeping in mind that roughly half of all demographic groups in the 3 upper education groups start in employment, we can conclude that at least 75% are working within one year. Considering Blacks with 12 years of schooling, those beginning employment in low-paying jobs typically find work more rapidly than their counterparts who start in high-wage jobs. However, about 5% of the group who start in low-paying jobs do not find work for the first 5 years.[4] Durations of this length are far more common for high-school dropouts, especially for Blacks. Regardless of whether first employment is a low- or high-wage job, around 50% of the Black dropouts do not find employment within 3.5 years[5]; between 5% and 10% of this group are not employed before 6 years. Indeed, the fact that the probabilities of first jobs in high-wage and low-wage employment do not sum to one for Black dropouts indicates that almost 5% of them are not employed even by the end of the 10-year period. The Hispanic dropouts fare significantly better than their Black counterparts; only about 5% have not found jobs before 4 years. The Whites fare slightly better than the Hispanics in the dropout group; only around 5% of them are not working before 3 years.

Pronounced differences exist in durations until first jobs across race-ethnic groups for low educational attainments, but these differences narrow for the upper education levels. Whites and Hispanics generally have the most rapid job acquisition in the high-school graduate and some-college groups. Blacks lag behind, much more noticeably for high-school graduates than for some-college individuals. For college graduates, race-ethnic differentials are not ordered in the same way as for the other groups; Hispanics are the most likely to start high-wage jobs, and they acquire low-wage jobs slightly more rapidly than Whites.

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[4] According to the results for high school graduates with low-paying employment as first jobs, almost 50% of the Blacks immediately find employment and the 90th percentile for the remainder is 252 weeks. Thus, approximately 5% of the total don't find employment for almost five years.

[5] Examining information on first jobs for high school dropouts, less than 30% of the Blacks find jobs immediately and the 75th percentile for those who don't immediately find jobs is 170 weeks or greater. Thus at least .7 x .75 = .53 of the Blacks aren't in their first job within 170 weeks.

Examination of the summary statistics for first jobs using the M definition of low-wage employment reported in Table 6.5-LQ supports the basic conclusions implied by the LQ definition, but there is a systematic shift in the results. Most notably, there is a sharp increase in the probability that the first job will be a low-wage job for all education groups with the size of the increase falling for the higher levels of educational attainment. For high-school dropouts, the probability that the first job is a low-wage job rises from around 40% in the LQ definition to almost 60% for the M definition; for the college-educated individuals the corresponding increase is from about 15% to about 20%. For the three lower education groups, the length of time it takes to acquire low-wage jobs is slightly longer under the LQ definition; for college graduates, there is no systematic difference in the waiting times for low-paying jobs.[6] Just the opposite occurs for the high-wage jobs. Here waiting times are shorter for the three lower education groups under the LQ definition; once again for college-educated individuals there is no systematic ranking of durations until first high-paying jobs.

Even after accounting for shifts in durations implied by the M definition, the basic findings supported by the LQ results continue to hold: pronounced differences exist in the durations until first jobs across race-ethnic groups for the two lower education groups; 25% of the Black high-school dropouts experience exceptionally long waits until first jobs, regardless of whether it is in low- or high-paying employment; Hispanic high-school dropouts fare better than Blacks but not as well as Whites; Whites and Hispanics in the high-school graduate and some-college groups have similar experience in their durations for first jobs, with Blacks lagging behind to a much greater degree in the high-school graduate group; there is a reversal of the ordering of the race-ethnic groups when considering first jobs in the college-educated group.

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[6] The main discrepancy between the percentiles for college-educated individuals and durations until first jobs that are low-wage is in the 90th percentile where 340 appears for the LQ definition and only 130 appears for the M definition. As noted in previous discussion, we have data for college-educated individuals only for the first few years after they leave school. Consequently, the 90th percentile for the LQ definition of 340 extrapolates well outside the range of our data.

6.5.2 Durations To and From Low-Paying Employment After First Jobs

Given entry to a low-paying job, the third group of rows in Tables 6.5-LQ and 6.5-M lists summary statistics for the durations until individuals enter some form of high-wage employment, either status *h* or *b*. The third column, designated "Population Percentage Experiencing Event," shows the fraction of the race-ethnic group in the education category who enter low-wage spells, and the next column designated "Percentage at Zero Weeks" lists non-applicable (na) throughout since all of these spells are strictly positive. The remaining columns in the table report the percentiles of the duration distribution associated with the initiation of low-wage employment until entry into some form of high-wage job.

Inspection of the findings in Table 6.5-LQ reveals that mobility out of low-wage jobs does not vary systematically across education levels, ignoring college graduates who experience noticeably more rapid movement into high-wage jobs than the other groups. Substantial differences exist in mobility out of low-wage employment across race-ethnic classifications for high-school dropouts. These differentials steadily dissipate the higher the educational attainment, with the differentials being relatively small for college-educated individuals.

Results indicate a great deal of mobility out of low-wage jobs, with the exception of some low-educated Blacks. Considering either high-school dropouts or graduates, around 50% of individuals entering low-paying employment are in a high-wage job within about 15 months; 75% hold such jobs within 2-2.5 years; and 90% enter such employment within 3-5 years. While the typical member of the race-ethnic groups--as measured by the median value--waits similar amounts of time to enter high-paying employment, in the tails of the distribution Blacks tend to wait the longest and Whites the shortest. A small segment of Black high-school dropouts experiences exceptionally long waits; 25% are not in high-paying employment before 3.5 years; and 10% are not in such employment even after 9 years.

The summary statistics reported in Table 6.5-M broadly support the conclusions drawn from the findings based on the LQ definition. Table 6.5-M predicts slightly longer durations until entry into high-paying employment, but most of the differences are inconsequential.

The fourth set of rows in Tables 6.5-LQ and 6.5-M presents findings for the durations associated with entry to low-wage employment measured from the time that a person begins a high-wage job (only status *h*). The statistics in the various columns correspond to those described above for durations from low- to high-wage jobs. The dashes reported in the tables indicate that a spell is right-censored at the 10-year mark.

Once in high-wage employment, the results of Table 6.5-LQ show that the level of education is a significant factor in determining the length of time before participation occurs in low-wage employment. Whereas 75% of college graduates who start a high-wage job wait at least five years before entering low-paying employment, 25% of the high-school dropouts are back in low-wage jobs within about a year.

The race-ethnic differentials for the length of spells from the start of high-wage employment until entry into low-wage jobs are not as pronounced as they were for the durations discussed above for low-wage to high-wage. Indeed, the Hispanics and the Blacks have the more favorable experiences in the upper two education groups. White and Hispanic high-school dropouts experience similar durations, with Blacks at the median entering low-wage employment slightly faster. For high-school graduates, Whites have the longest durations until participation in low-wage jobs, followed by Hispanics, with Blacks experiencing the shortest durations. In the some-college and college-graduate groups, Hispanics have the longest spells before entrance into low-paying employment, followed by Blacks, with Whites having the shortest durations.

The findings support the general conclusion that the majority of people entering high-paying employment will not experience low-wage jobs for quite some time, regardless of educational attainment. This is not to say that the possibility of entering low-wage employment is small in the near future for those individuals in the bottom two education groups. At the time of the start of a high-wage job, about 50% of high-school dropouts take part in low-paying employment within about 3.5 years. Over 25% avoid such jobs for over 8 years, and this number would be above 10 years if one ignored the experiences of Blacks.

These conclusions about the duration of spells from the start of high-wage employment until entry into low-wage jobs are not altered when one examines the relevant statistics in Table 6.5-M. The shift in some percentiles is quite large when compared to those obtained using the LQ definition, but the implications of these shifts is immaterial to the main emphasis.

6.5.3 Time Between Low-Wage and Training Experiences

The fifth group of rows in Tables 6.5-LQ and 6.5-M lists summary statistics for the durations until an individual enters training after beginning a low-paying job; and the sixth group reports analogous results for durations until entry into low-wage employment measured from the initiation of training.

Examination of the findings in Table 6.5-LQ for high-school dropouts reveals that at least 90% of individuals who enter a low-wage job wait at least a year before going into training. Blacks wait the shortest amount of time; over 50% are in training within 5 years. While a minority of high-school graduates (10%) move into training more rapidly than their high-school dropout counterparts, the vast majority of graduates take a longer time to enter training. Those with some college typically take less time to enter training than high-school graduates; and college graduates take even less time.

The findings in Table 6.5-LQ show that durations between training and entry into low-wage employment lengthen dramatically for higher levels of education. Given entry into training, over 75% of the high-school dropouts avoid low-paying employment for well over one year; 50% avoid such employment for well over three years; and over 25% are not seen in low-wage jobs for over 10 years. While Hispanics in the dropout group tend to have the shortest durations, the race-ethnic differentials are less noticeable than in the previous analyses. Not surprisingly, White and Hispanic high-school graduates participating in training wait even longer before entering low-wage jobs than their dropout counterparts; this is not true for Blacks. In the some-college category, Hispanics have the longest durations, and Blacks the shortest; entry into low-wage employment is unlikely for all demographic groups. Durations substantially lengthen for the college graduates, and the race-ethnic differentials virtually disappear.

While the main points of the picture described above do not change when one considers the M definition of low-wage employment, there are some systematic differences in the results reported in Table 6.5-M when compared to the corresponding findings in Table 6.5-LQ. In particular the duration until training given entry into low-wage is systematically longer in Table 6.5-M for the upper two education groups. On the other hand, the duration until low-wage given entry into training is typically shorter for these two education groups in Table 6.5-LQ. There is a tendency for these patterns to show also in the two lower education groups, but it is not nearly as systematic. In any case, the relationships mentioned in the previous analysis across the various levels of educational attainment and race-ethnic groups continue to apply under the M definition of low-paying employment.

6.5.4 Summary of Findings for Durations To and From Low-Wage Jobs

The essential findings from Tables 6.5 are as follows:

- **Approximately 50% of high-school dropouts start their employment in low-wage jobs. This percentage drops steadily for higher education levels, falling to below 20% for college graduates.**

- **Durations until first employment generally decline with education, except for the two upper education groups which are roughly similar. For education groups other than high-school dropouts, the vast majority of young men find their first job shortly after leaving school, with at least 75% working within 1 year. Long durations until first employment occur for some segments of the high-school dropout and high-school graduate populations.**

- **About 2.5% of Black high-school graduates starting their first employment in low-paying jobs do not begin working within 5 years after leaving school. Regardless of whether first employment is in low- or high-wage jobs, about 50% of Black high-school dropouts do not find employment within 3.5 years, and between 5%-10% are not employed before 6 years. About 5% of Hispanic high-school dropouts do not find jobs before 4 years after leaving school; and about 5% of the Whites dropouts are not working before 3 years. White and Hispanic dropouts who enter low-paying jobs as their first employment acquire these jobs more rapidly than their counterparts who enter high-paying jobs as their first employment; this is not true for Blacks.**

- **While pronounced differences exist in the durations until first jobs across race-ethnic groups for low-educational attainments, the differences are only marginal at higher levels of education.**

Concerning the durations from low-wage employment to high-paying jobs, the findings support the following conclusions:

- **There is a great deal of mobility out of low-wage jobs with the exception of some low-educated Blacks. About 50% of high-school dropouts or graduates entering low-paying employment find a high-wage job within about 15 months; 90% find such employment within 3-5 years. While the typical members of race-ethnic groups wait similar amounts of time to enter high-paying employment, a component of Black high-school dropouts experiences exceptionally long waits; 25% are not in high-paying employment before 3.5 years, and 10% are not in such employment even after 9 years.**

- **Mobility out of low-wage jobs does not vary systematically across education levels, except for college graduates who experience noticeably more rapid movement into high-wage jobs than any other group.**

- **Substantial differences exist in mobility out of low-wage employment across race-ethnic groups at lower levels of educational attainment, but these differentials steadily dissipate for the higher education groups and become inconsequential for college graduates.**

The findings on the durations from high-paying employment to low-wage jobs leads to the following conclusions:

- **Once in high-wage employment, individuals with higher education are likely to stay out of low wage employment for much longer than less-educated men. Whereas 75% of the college graduates who start a high-wage job wait at least 5 years before entering low-wage employment, 25% of high-school dropouts are back in low-wage jobs within about a year.**

- **The findings generally support the view that the majority of people entering high-paying employment will not experience low-wage jobs for quite some time, with only the members of the two lower education groups having much of a chance at all in the near future. Measured from the beginning of a high-wage job, about 50% of high-school dropouts take part in low-paying employment within about 3.5 years; over 25% avoid such jobs for over 8 years.**

6.6 Linking Work Histories and Future Labor-Market Activities

An important aspect of the process governing the relationship between low-wage employment and economic mobility is the role that prior labor-market experiences play in future employment activities. The findings reported above provide only limited insights into the importance of early labor-market activities in altering subsequent employment experiences. For instance, the results reported in Sections 6.2 through 6.5 do not allow us to ascertain the importance of any potential compounding effects of labor-market experiences. To fill in this part of the picture, this section addresses questions such as: Do individuals end up spending a significant amount of time in low-wage employment and nonemployment because they start life with a bad set of experiences that continue to influence experiences unfavorably for a long time into the future, or does the influence of early labor market experiences dissipate rather rapidly? How important are the different early labor-market experiences in explaining the race-ethnic differentials found in the previous analyses?

Tables 6.6-1 through 6.6-4 present a variety of summary statistics describing the cumulative number of weeks that individuals spend in five labor-market statuses during the three years immediately following various hypothetical 2-year work experiences. All the findings in these tables rely on the "LQ" definition of low wages. Table 6.6-1 reports results for high-school dropouts; Table 6.6-2 gives analogous findings for high-school graduates; Table 6.6-3 lists statistics for the some-college category; and, finally, Table 6.6-4 summarizes results for college graduates. The rows in the tables consider five

84

labor-market activities: low-wage, which refers to cumulative weeks over 3-year horizon in status ℓ; high-wage+both, which sums cumulative weeks over 3-year horizon in statuses h and b; training, which represents cumulative weeks classified in activity e in the 3-year period; nonemployment, which signifies the total weeks spent in status n; and low-wage+nonemployment, which totals the number of weeks in statuses ℓ and n during the three years.

Each table considers six scenarios regarding the labor-market activities experienced by an individual in the first two years of the career after leaving school. The designation of these 2-year work histories and their corresponding definitions are:

Base Case:	75% of 2-year period spent employed Weeks of employment equal in the first and second year No training in 2-year period All employment in two years in low-wage jobs
More n:	Base Case, except only 25% of 2-year period spent employed
Recent n:	Base Case, except all employment occurs in the first year and none in the second
Training:	Base Case, except individual participates in 10 weeks of training in the 2-year period
Early ℓ:	Base Case, except low-wage experience only in the first year and all employment in second year in high-paying jobs
No ℓ:	Base Case, except no low-wage experience at all in the 2-year period

These tables report statistics summarizing the experiences in the three years directly succeeding the 2-year work histories specified above, with the 2-year period assumed to end in an exit from a one-week spell in nonemployment.

Each cell in these tables presents results for Whites, Blacks, and Hispanics, with the columns focusing on different aspects of the distributions of cumulative weeks. The first set of columns gives the fraction of the population that participates in the five labor-market activities at any time in the 3-year horizon. The second set presents the average number of weeks spent in the various activities over the three years. The remaining columns report the 10th, 25th, 50th, 75th, and 90th percentiles for the simulated distributions.

6.6.1 Relationships Between Previous Work Experience and Future Employment

Comparing the first three labor-market scenarios presented in the tables for each of the education groups reveals that the total amount of previous labor market experience is a prominent predictor of individuals' future employment, irrespective of whether the previous experience is recent or not. Whereas shifting from the "base case" to "more *n*" induces a sharp decrease in total employment over the 3-year period (i.e., increase in nonemployment), especially for the lower education groups, movement from the "base case" to "recent *n*" produces only marginal shifts in total employment. Holding the total amount of past work experience constant in the first two years, the primary consequence of making this labor-market experience more recent (i.e., moving from "recent *n*" to "base case") is to shift future employment slightly from low- to high-wage jobs. In sharp contrast, a lowering of total employment in the first two years induces a decrease in employment over the subsequent three years, with the effect diminishing with higher levels of education. A one-year increase in experience in the first two years implies: a 4-month rise in employment over the subsequent three years for high-school dropouts; a 3-month increase for high-school graduates; about a 2-month rise for those with some college; and only a one-month increase for college graduates. The effects are even more dramatic for those individuals experiencing the highest amounts of nonemployment in any education group. Comparison of the 90th percentiles of nonemployment across educational attainments reveals that a one-year increase in experience leads to a 4-5 month rise in employment or training over the following 3-year period for all groups other than college graduates. For those experiencing the most nonemployment over the 3-year period, a shift of experience from early in the first two years to later in this period makes little difference in the total amount of nonemployment experienced over the future 3-year horizon.

6.6.2 Effects of Training and Composition of Past Employment on Future Work Activities

The comparison of the "training" scenario with the base case indicates that higher training implies only marginal increases in employment over the subsequent 3-year horizon, and it does very little to shift employment from low-wage to high-wage jobs. For the lower two education groups, training during the 2-year work history signals slight increases in the amount of training done over the future three years of the working career. No doubt, this positive influence of past training on future training in part reflects our definition of training which incorporates vocational training while employed as well as pure educational activities. For the upper two education groups, increased training has essentially no effect on any labor-market activities during the subsequent 3-year horizon.

Comparing the base case with the last two labor market scenarios listed in the tables (i.e., "early ℓ" and "no ℓ") helps determine the role of altering the composition of past labor-market experience from low-wage to high-wage jobs. For high-school graduates and beyond, switching previous labor-market experience from low- to high-paying employment primarily implies a near one-to-one substitution of high-wage for low-wage jobs in subsequent time spent employed, with the effect almost nonexistent for college graduates. While this substitution is even larger for high-school dropouts, a shift of past labor-market experience from low-wage to purely high-wage employment also implies an increase in average employment in the future, amounting to approximately 1-2 months during the 3-year horizon. This increase in employment is not larger for those in the group who experience the largest amount of nonemployment (i.e., those at the 90th percentile).

6.6.3 Summary of Findings for Work Histories

The results in Table 6.6 suggest that much of the differences observed across the race-ethnic groups in the earlier discussion reflects a compounding effect of previous work histories on future experiences, rather than an unalterable disparity inherent in the race-ethnic groups. Tables 6.6 assume the same work history at the end of the first two years after leaving school for all individuals of a given educational attainment, and the resulting differences in labor-market experiences over the next three years across race-ethnic groups are much smaller than those noted in Sections 6.2. Examining Tables 6.1-LQ and 6.2-LQ shows that the difference between White and Black high-school dropouts is more than a year for the combined status of low-wage+nonemployment when considering either of the 5-year periods making up the 10-year horizon (comparing either the means or the percentiles above 10%).[7] Comparing Whites and Blacks in Table 6.6-1 for the combined status of low-wage+nonemployment reveals differentials that typically fall well below 6 months for any scenario considered, even at the extremes of the distribution. Similarly, the differentials observed in Table 6.2-LQ for nonemployment in either of the 5-year periods between White and Black high-school dropouts are enormous when compared to the differentials presented in Tables 6.6-1, given any reasonable adjustment for the different time spans. For the three upper education groups, the differences observed across the race-ethnic categories in Tables 6.6 compared to earlier findings for these groups are even less pronounced than for high-school dropouts.

In summary the findings from Tables 6.6 allow us to draw the following conclusions:

- **The main factor predicting the amount of future employment is the total amount of past labor-market experience, irrespective of whether this past**

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[7] For years 1-5, the 90th percentile differs only 29 weeks between White and Black high school dropouts, however this reflects the fact that a large fraction of the Blacks are truncated at 260 weeks which represents the entire 5-year period.

89

experience occurred recently or whether it occurred in low- or high-wage employment.

- **The link between previous work experience and future employment diminishes with higher levels of education.**
- **A large component of the race-ethnic differentials observed in the amount of employment and the fraction of this employment spent in high-wage jobs reflects the accumulation of unfavorable experiences early in the work career that have a compounding effect on subsequent labor-market activities.**

While it may be tempting to interpret the above findings in causal context, it is not appropriate to do so. Some of our statements summarizing the results in this section may suggest an attempt to make a causal link between labor-market experiences in our analysis, but we recognize that the empirical results presented throughout this study are purely descriptive in character. They are derived from a nonstructural statistical model that does not provide a basis for inferring causal relationships. Given a particular labor-market history applicable up to some year after leaving school, our empirical model predicts the lengths of time that individuals with this history will spend in alternative labor-market activities in the future; it predicts the routes followed by these individuals into low-wage labor markets, as well as the conditions linked to continued participation in these markets and to return participation; and it further predicts the routes of escape from low-wage markets. Prediction, however, is not a basis for inferring causality.

While our empirical findings cannot formally be given a causal interpretation, they do indicate how early labor-market scenarios link to subsequent employment activities, and they identify the dynamic relationships associated with participation in the low-wage sector. An elaborate behavioral interpretation of our findings is not needed to answer most of the questions cited in the previous discussion. For those questions where a reader believes that a behavioral link is required for an answer, the same care must be exercised in using our empirical findings to arrive at an answer as one would apply in interpreting the estimates of multiple regression models in a behavioral context.

7. Conclusion

The findings of this study offer many insights into the role played by low-wage jobs in the overall employment picture of youths, and a synthesis of these results provides a useful source for addressing several important questions about this role. The subsequent discussion undertakes such a synthesis in an effort to answer the following questions:

- Among young men, who participates in low-wage sectors?
- How much does earnings from low-wage jobs contribute to income?
- Is employment less stable for workers in low-wage markets?
- Is participation in low-wage sectors temporary or persistent?
- Is low-wage employment a port-of-entry into high-paying jobs?

Disputes over the answers to these questions are often at the heart of many public debates over government intervention in labor markets.

One of the most prominent examples concerns policies dealing with the setting of minimum wages. The main rationale for raising minimum-wage rates as an anti-poverty program presumes that participation in low-wage jobs is relatively permanent and that earnings from these jobs contribute a significant fraction to household income. The arguments against minimum wage legislation, or for the inclusion of sub-minimum training wages in such legislation, rely on the supposition that the hourly wages earned on jobs early in a career are not nearly as important for new labor-force entrants as are the opportunities for these entrants to acquire the work experience that leads to upward mobility in the labor market. Answering the above questions provides critical information for establishing the validity of the alternative suppositions maintained by opposing parties in minimum-wage debates. We consider them in the order listed.

7.1 Among Young Men, Who Participates in Low-Wage Sectors?

All demographic groups have some experience. High-school dropouts and high-school graduates have a 75%-80% chance of holding a low-wage job at sometime during the first 10 years after leaving school. The participation rate of college graduates in the low-wage sector during their first 5 years after school is a surprisingly high 30%.

High-school graduates experience the most time in low-wage jobs during the 10-year period after school, followed by high-school dropouts, with college-educated individuals having considerably less experience. The larger amount of low-wage employment for high-school graduates relative to dropouts reflects that a significant segment of the dropout population spends a considerable amount of time in nonemployment. High-school dropouts and graduates average 1-2 years of low-wage employment during the 10-year period. Approximately 50% of high-school dropouts start their employment in low-wage jobs; this percentage steadily drops for higher levels of education, falling to well below 20% for college graduates.

Measurements designed to gauge the extent of low-wage employment in any population depend critically on the time frame used to register participation as well as on the age of individuals. For high-school dropouts and high-school graduates, the participation rate in low-wage employment is as large as 59% when registering participation as holding any low-wage job in a 2-year period in the late teens, and it is as small as 11% when participation refers to holding a low-paying job during an arbitrary quarter when individuals are in their late twenties.

Regardless of the age and education of young men, participation in low-wage jobs is twice as likely to occur over 2-year horizons than in any particular quarter making up this horizon. Irrespective of the time frame used to catalog participation, the likelihood of holding low-wage jobs declines with age (by as much as 50%), with the most significant decreases occurring at the earlier ages. As individuals age, education becomes a stronger factor determining the likelihood of holding a low-wage job.

Race-ethnic differences in low-wage participation are relatively minor at young ages, but they tend to widen at older ages especially at lower levels of education. Ignoring college graduates, Blacks tend to have the highest participation rates in the low-wage sector, with no systematic ordering between Whites and Hispanics. Race-ethnic differentials are inconsequential for college graduates.

7.2 How Much Does Earnings from Low-Wage Jobs Contribute to Income?

The fraction made up by earnings from low-wage jobs falls as one considers longer horizons for accumulating income and broader sources of income. Earnings from

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low-wage jobs is a relatively high fraction of individuals' labor income earned during the quarter during which these jobs were held; it is a much smaller fraction of total family income received over 2 years. For high-school dropouts and high-school graduates, earnings from low-wage jobs average as much as 86% of total labor income during those quarters during which such jobs were held; this average drops to as little as 30% when calculating the contribution of these earnings to total family income received over 2-year periods during which low-paying employment occurs. For college graduates, the analogous percentages are 71% and 15%.

For less-educated men who hold low-wage jobs, earnings from these jobs account on average for 65%-80% of total family income received in a quarter, and 40%-50% of family income received over 2-year periods when low-paying jobs are held. Considering individuals' labor income alone, the fraction of earnings coming from low-wage jobs for poorly-educated participants ranges between 69%-88% when considering the contribution of these earnings to quarterly labor income; and it ranges between 33%-61% when considering the contribution to total labor income received during 2-year periods when low-wage jobs are held.

The contributions of earnings from low-wage jobs to any measure of income over any period declines with age and with higher levels of education. The rate of decline associated with aging is much steeper for higher education levels. At the lower levels, the fraction of any measure of income made up by earnings from low-wage jobs is typically highest for Blacks, with Hispanics second, and with Whites having the lowest fractions. Race-ethnic differentials are insignificant for college graduates.

7.3 Is Employment Less Stable for Workers in Low-Wage Labor Markets?

A central finding in this study concerns the role of work experience in future labor-market activities. The total amount of past employment is the main factor predicting the extent of future employment, irrespective of whether this past experience occurred recently or whether it occurred in low- or high-wage jobs. Within any education group, past employment is the primary factor governing the stability of individuals' future employment. The link between previous labor-market experience and future employment diminishes at higher education levels. A large component of the race-ethnic differentials observed in the amount of employment and the fraction of this employment spent in high-wage jobs reflects the influence of limited employment early in careers--i.e., time spent out-of-work, not time spent in low-wage jobs--that has a compounding effect on subsequent labor-market activities.

7.4 Is Participation in Low-Wage Sectors Temporary or Persistent?

There is a great deal of mobility out of low-wage jobs. The evidence does not support the notion of a low-wage "trap". Young men spend relatively little time in low-paying employment in the first 10 years after school. Individuals typically experience very few entries into low-wage jobs during this period. Even for the lowest education groups, only 50% start low-paying jobs 2 times or more during the 10-year period; only

10% start such jobs more than 4 times. Further, the durations of spells in low-wage employment are surprisingly short. Typical spells last for less than 5 months for the high-school dropouts, and around 6 months for high-school graduates and beyond; 90% of all spells are completed well within 2 years. High-school dropouts and graduates average a modest 1-2 years of low-wage employment in total during the 10 years after school; the majority spend less than 1 year; and only 10% of this population spend more than 4 years in low-paying jobs.

About 50% of high-school dropouts or graduates entering low-paying employment find a high-wage job within 15 months; 90% find such employment within 3-5 years. While the typical members of race-ethnic groups wait similar amounts of time to enter high-paying employment, a component of Black high-school dropouts experience exceptionally long waits; 25% are not in high-paying employment before 3.5 years; and 10% are not in such employment even after 9 years. Most of this wait, however, does not reflect long periods spent in low-wage employment, instead it reflects much time spent out of work.

Mobility out of low-wage jobs does not vary systematically across education levels, except for college graduates who experience noticeably more rapid movement into high-wage jobs. Substantial differences exist in mobility out of low-wage employment across race-ethnic groups at lower levels of education, but these differentials steadily dissipate for the higher education groups and become inconsequential for college graduates.

If there is any notion of a "trap" in the labor market, it must incorporate time spent out-of-work along with low-paying employment. Time spent in the combined state of nonemployment and low-wage jobs provides a notion of a labor-market status more relevant than time spent in low-paying employment alone for judging the prospects of individuals in the subsequent stages of their working careers. The extent of participation in the combined status of low-wage jobs and out-of-work diminishes sharply for higher levels of education and for older workers.

Less-educated Blacks spend an exceptionally large amount of time in this status, and the experiences for some poorly-educated White and Hispanic dropouts are not much better. More than 50% of Black high-school dropouts spend more than 6.5 years in low-paying jobs or out of work during the first 10 years after school; and 10% spend more than 9 years. About 50% of Hispanics spend about half of the 10-year period in low-wage employment or out of work; and 10% participate almost 9 years in these statuses. White dropouts fare better than Blacks and Hispanics, and yet 10% of Whites spend 7.5 years or more in low-wage jobs or out of work.

The large amount of time spent in this combined state of low-wage employment and nonemployment primarily reflects the influence of insufficient labor-market experience early in the career which predicts low future employment. When individuals acquire labor-market experience, even in low-wage jobs, their prospects for future employment are significantly enhanced.

7.5 Is Low-Wage Employment a Port of Entry into High-Paying Jobs?

Increasing employment at any wage implies more time spent in high-wage jobs in the future. The evidence supports the familiar concept of life-cycle wage growth, which depicts participation in low-wage sectors as offering individuals the opportunity to acquire the work experience and additional skills needed to move on to higher-paying jobs in the future. The acquisition of work experience in low-paying jobs at earlier ages not only implies more employment in the future, but a greater amount of this future employment takes place in high-paying jobs.

The findings generally support the view that the majority of people entering high-paying employment will not experience low-wage jobs for quite some time, though a nontrivial fraction of the high-school dropouts and graduates become involved in low-wage employment in the not-too-distant future. From time of entry into a high-wage job, 25% of high-school dropouts are in low-paying jobs within about a year. On the other hand, over 25% avoid such jobs for over 8 years.

Once in a high-wage job, educational attainment is a significant factor in determining the length of time before participation occurs in low-wage employment. Whereas 75% of the college graduates who start high-wage jobs wait at least 5 years before entering low-wage employment, about 50% of high-school dropouts are back in low-wage jobs within 3.5 years. Race-ethnic groups have broadly similar experiences in entering low-paying employment after working at a high-wage job, regardless of the level of educational attainment.

7.6 Concluding Remarks

The two definitions of low-wage employment used in our empirical analysis imply very low thresholds for the hourly wage rate, and this factor may account for the close similarity in our empirical findings based on these two definitions. Expressed in 1990 dollars, both of our wage thresholds fall below $5.50 per hour, which most people would accept as a low wage. While our definitions may be relevant for considering proposed movements in minimum wages, many would define the relevant concept of a low-wage labor market using a much higher level for hourly earnings than adopted in this study. If one were to use a higher threshold in our empirical analysis, it is quite possible that the answers offered above would have been quite different.

No matter what dimensions of work activities considered in our study, education plays a critical role in neutralizing any disadvantageous attributes or array of experiences. The relationships between previous labor market experiences and the characteristics of future employment become less pronounced the higher the level of education. For all categories of labor-market experiences, race-ethnic differentials steadily diminish for higher educational attainments, with differences becoming negligible for college graduates. Education is the single most important factor in improving individuals' prospects for the extent of future employment and for the fraction of this employment spent in high-paying jobs. After education, the total amount of time spent employed is the major factor influencing future employment prospects.

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Appendix A

This appendix describes the procedures used in the construction of the data set analyzed in this study. The first section briefly describes the data set and details the selection criteria applied in choosing the analysis sample. The second section describes the construction of the variables contained in the analysis data set.

A.1 The Sample

The data used in this study are from the first ten rounds of the National Longitudinal Survey - Youth Cohort (NLSY). The NLSY covers both a randomly chosen, nationally representative sample of 6,111 young people, and a supplemental sample of 5,295 Black, Hispanic, or economically disadvantaged non-Hispanic, non-Black youth. The investigation concentrates on the labor market experiences of male respondents from both components of this survey. These young men were 14 to 21 years of age as of January 1, 1979. The youths themselves were interviewed annually beginning in 1979 and information about the labor market experiences of these young men is drawn from the first ten rounds of the NLSY covering the years 1978 to 1988.

This paper analyzes a data set of 2,699 young men drawn from the nationally representative sample of the NLSY and the supplemental samples of young Black and Hispanic men. The economically disadvantaged non-Black, non-Hispanic sub-sample is excluded from the analysis data set because there are a number of shortcomings in the way this supplemental sample was originally constructed. This exclusion restriction reduces the available sample size from the 5,579 men in the non-military samples of the NLSY to 4,837. Inclusion in the analysis sample also required a young man to pass two other screens. The first screen required the person to be interviewed in every year of the first ten rounds of the NLSY. This restriction reduces the analysis sample from 4,837 to 3,744 young men. Table A.1 details the number of men dropped from the analysis sample by the year in which they first missed an interview. Finally, to ensure we are capturing a man's experiences from the first time he permanently enters the labor market an individual must have permanently left school sometime between January 1978 and the 1988 interview date to be included in the analysis data set. This last screen eliminates 1,045 men from the data set.

To determine if these selection rules result in an "unrepresentative" sample of young men, Table A.2 presents a breakdown of the male respondents in the NLSY and our analysis data set by sample component and racial origin. A casual survey of this table suggests that our analysis sample is representative of the male population represented in the entire NLSY.

A.2 The Variables

The variables that enter into the data set analyzed in this study can be grouped into five categories: (1) labor market experiences; (2) regular school attendance; (3) participation in other educational programs; (4) sources and amount of nonlabor income; and (5) demographic variables. Each subsection below details the construction of the specific variables within these categories. A weekly series beginning with January 1978 and running through the week of the 1988 interview is created for every variable. These weekly series are combined in various ways to construct the data sets for the empirical analyses reported in the main body of the paper. The specific methods we use to combine the weekly series are outlined in the relevant section of the paper.

A.2.1 Labor-Market Experiences

The NLSY provides an exhaustive amount of information about the labor market experiences of youths. The specific data that are relevant to this analysis include the information collected on the dates of employment, the usual weekly hours and the usual wage rate. This detailed information is obtained for every significant job held by the youth from 1978 on; however, respondents are not asked these detailed questions for extraneous jobs. Specifically, for a job held for less than nine weeks or involving less than twenty hours per week, wage information is missing for this job unless it is the main job at the interview date, or it is not part of a government training program. In addition, these detailed questions are not asked if the respondent is less than 16 years of age at the time of the interview.

Even though the earnings and hours of work from these extraneous jobs should account for a negligible fraction of total labor income and hours of work, we explored two approaches to impute any missing information. The first method imputes a missing wage rate and/or hours of work for a specific job by using available information regarding this job from other survey years. Specifically, if the respondent worked at the same job in any other year of the survey and he reported a value corresponding to the missing wage rate/hours of work information, this value is used in place of the missing variable. In the case of a missing wage rate the imputed value is adjusted to account for general changes in wages. The adjustment factor we used to deflate or inflate the value is based on the observed year to year percentage changes in hourly earnings from the analysis sample. The second approach to impute missing information uses the self-reported annual earnings and hours of work information in the survey. In particular, the procedures reported in Cameron, Gritz and MaCurdy (1989) are used to construct alternative measures of annual quantities to compare to the reported values. Unfortunately, this approach resulted in numerous negative values for wage rates and hours of work. Therefore, we only use the first method to impute any missing values.

Missing information concerning the hourly wage rate at a specific job does not allow us to make the distinction between low-wage employment and high-wage employment that is a critical feature of our analysis. Thus, we are forced to drop an individual from the analysis sample the first time after he holds a job that does not have a reported or imputed wage rate. Missing wage information for jobs held before the individual permanently leaves school are ignored because the analysis only examines the low-wage and high-wage employment experiences of men after they permanently enter the labor market. For example, consider a young man who acquires a new job with a missing wage four years after leaving school. This man's labor market experiences for the first four years are included in the sample analyzed in the paper; however, any experiences after the date he first held this job are excluded from the analyses.

We create eight weekly series to characterize the low-wage and high-wage employment experiences of respondents for each of the two concepts of low-wage employment (i.e., the LQ and M thresholds) presented in the paper. For every job held during a week we compare the reported or imputed wage rate to the relevant threshold to classify a job as either low-wage or high-wage employment. If the reported or imputed wage rate is below the low-wage threshold a job is considered low-wage employment. Conversely, if the wage is above the threshold the job is classified as high-wage employment. There are four series to summarize low-wage experiences, and four analogous series to capture high-wage experiences. In particular, the four low-wage series are: (1) the number of low-wage jobs held during the week; (2) the total number of hours worked in low-wage jobs that have either a reported or imputed value; (3) weekly earnings in all low-wage jobs that have a valid measure of hours; and, (4) the number of low-wage jobs that have a missing value for hours of work. These eight series provide information on the extent of multiple job holding, the division of hours of work between low-wage and high-wage jobs, and the fraction of total earnings derived from low-wage employment on a weekly basis.

A.2.2 Regular School Attendance

Regular schooling refers to educational activities designed to culminate in the award of a high school diploma or a college degree. These diploma/degree programs will generally be available in primary/secondary schools, community/junior colleges, 4-year colleges and universities. With regard to regular school attendance the NLSY obtains information relating to participation in regular schooling at each interview including whether the respondent is currently enrolled in school, if the individual was enrolled in school at any time since the last interview, the highest grade attended if enrolled since the last interview, and the last date of attendance if the person is not currently enrolled but he attended school since the last interview. In addition, information is collected regarding the highest grade completed by the respondent and whether he has obtained either a high-school diploma or a GED certificate since the last interview, as well as the month he received the diploma/certificate.

Two weekly series are created to summarize the regular schooling activities of respondents. The first series summarizes the highest grade completed by the respondent prior to each week. The second series consists of an indicator variable that equals one if the respondent is classified as attending regular school during a particular week and zero otherwise. We cannot determine the exact weeks of participation in regular schooling so we use a simple assignment scheme based upon schooling status at the interview date and the reported last date of attendance. Specifically, if the individual was enrolled in school at an interview date, the series is set equal to one for each week since the last interview week (January 1978 for the first interview) including the current interview week. Further, if the respondent is not enrolled at the interview but he has attended school since the last interview, we can only determine the last month he was enrolled in school. Accordingly, as long as the reported last date of attendance is after the last interview date, the series is set equal to one for each week since the last interview week up to and including the last full week in the month of last attendance. Finally, if neither of the above conditions are met, the series is equal to zero for each week since the last interview.

A.2.3 Participation in Other Educational Programs

NLSY respondents are also asked about their participation in educational programs other than regular schooling. These other educational programs primarily consist of several government training programs (e.g., CETA, JTPA, Job Corps) and a wide variety of privately provided training including formal company training programs as well as vocational schools. To be included in this category of educational activities the training program must last at least four weeks but it does not have to result in any formal degree or certificate.

The training data obtained at each annual interview consists of information on participation in training programs before 1978, the beginning and ending dates of training spells that occur after January 1978, the respondent's success in completing the training program, the type of program, the occupation being trained for (if applicable), and the usual number of hours per week spent in the program. Although we are interested in the role training plays in determining individuals' employment experiences, we create a single weekly series to summarize the training activities of the young men in our sample. Specifically, we create a weekly series consisting of an indicator variable that is equal to one if the person is participating in either a government or private training program during a given week.

A.2.4 Sources and Amount of Nonlabor Income

To construct the tables in Section 3 of the paper we require information on the amount of nonlabor income by source. At each interview annual information is obtained about numerous income sources and the amount of income derived from each source during the previous calendar year for both the respondent and other members of the respondent's household. These measures include income from unemployment compensation, business or farm income, alimony and child support payments, educational benefits, the cash value of transfer payments from government welfare programs, and income from other persons or sources. Further, if the respondent was married at the time of the interview, annual information covering the previous calendar year is also obtained concerning a spouse's labor market earnings, business or farm income, income from unemployment compensation, educational benefits, and income received from other persons or sources. Alternatively, if the respondent was cohabitating with an opposite sex adult as a partner at the time of the interview, information is collected about the total income received by this person in the previous calendar year.

We create three weekly series to capture other sources of household income. The first series characterizes the nonlabor, nontransfer income of the male respondents including income from unemployment compensation, business or farm income, alimony and child support payments, educational benefits and income from other persons or sources. The second series summarizes the total income of a respondent's spouse or opposite sex adult partner. The third series captures transfer income from three government welfare programs (i.e., Aid to Families with Dependent Children (AFDC), Food Stamp Program (FSP) and Supplemental Security Income and/or any "other public assistance" (OPA) programs). The measures that enter into the first two series are annual quantities and we use a simple averaging scheme to assign weekly amounts. For the respondent's other income series, weekly income is equal to 1/52 of the sum of the annual measures. The procedure used for the second series depends upon the household structure during the relevant week. If the respondent is married during the previous calendar year, the second series is equal to 1/52 of the spouse's total income for the weeks he was married in the past year. If the respondent is not married but living with an opposite sex adult as a partner at the time of the interview and he was living with a partner at the last interview, the second series is equal to 1/52 of the partner's total income in each week of the previous calendar year. Finally, if neither of the above conditions are met, the second series is set equal to zero for the entire 52-week period covering the relevant calendar year. Data for the third series are recorded on a monthly basis and we can determine the exact months of receipt as well as an average monthly amount for total welfare benefits. Thus, for each week that begins during a particular month the third series is equal to the sum of the total benefits received during this month divided by 4.3 to obtain an average weekly amount of transfer income.

A.2.5 Demographic Variables

The NLSY provides an extensive amount of demographic information. The demographic variables of interest for our analysis are the marital status of the man, his age and his racial origin. The NLSY collects data at each interview regarding the month and year of any change in marital status since the last interview. These changes include information not only on marriages and divorces but also on separations, reconciliations and the death of a spouse. With respect to age and racial origin, the respondents self-reported their date of birth and we base their racial origin upon the assignment of the respondent to a specific sample component in the NLSY. Specifically, the three sample components are: non-Hispanic, non-Black (referred to as White in the paper); Black; and Hispanic.

We create three weekly series of demographic variables. The first series consists of an indicator variable that equals one in a given week if the respondent reported being married with their spouse present and zero otherwise. For instance, this indicator variable is set to one in the first week of the month an individual reports a marriage or reconciliation and remains equal to one until the next time he reports a divorce, separation or death of a spouse. The second series measures the age of the respondent in years and months in each week from January 1978 to the last interview week. Finally, the third series is simply the racial origin of the respondent and is constant over the entire period.

Table A.1

Year of Interview	Number of Observations Deleted for Missing Interview	Number of Observations Remaining
1979	--	4837
1980	210	4627
1981	92	4535
1982	89	4446
1983	55	4391
1984	106	4285
1985	125	4160
1986	139	4021
1987	158	3863
1988	119	3744

Table A.2

Sample Component and Racial Origin	Number of Observations in Entire NLSY Sample[a]	Number of Observations in Analysis Sample[b]
Random Sample, non-Hispanic, non-Black	2439 (50.4)	1394 (51.6)
Random Sample, Black	346 (7.2)	192 (7.1)
Random Sample, Hispanic	218 (4.5)	109 (4.1)
Supplemental Sample, Black	1105 (22.8)	636 (23.6)
Supplemental Sample, Hispanic	729 (15.1)	368 (13.7)

[a] The number in parentheses is the proportion of the original sample of the NLSY men from each sub-sample.

[b] The number in parentheses is the proportion from each sub-sample of the original sample of the NLSY men interviewed in each of the 10 years and who permanently entered the labor market after January 1978.

Appendix B

This appendix describes the empirical specifications that are estimated to construct the comprehensive picture of the labor market experiences of young men presented in the main body of the paper. This appendix contains two subsections. The first subsection describes the empirical specifications employed to estimate the spell distributions that characterize the amount of time an individual continuously occupies each of the five labor market statuses outlined in Section 2 of the paper. The second subsection specifies the empirical model used to estimate the entrance probabilities that summarize the likelihood an individual enters each of the alternative statuses given he has left a particular status.

B.1 An Econometric Framework for Estimating Duration Distributions

A duration distribution characterizes the likelihood an individual experiences a specific number of weeks in a particular labor market status given initial entry into the status. A formulation for the duration distribution is given by

$$f_i(\tau) = S_i(\tau-1)[1-P_i(\tau,Z)], \tag{B.1}$$

with

$$S_i(\tau-1) = \prod_{t=1}^{\tau-1} P_i(t,Z), \tag{B.2}$$

where $P_i(t,Z)$ represents the probability of continuing in a particular status that conditions on the variables t and Z , and i designates an arbitrary labor market status. The function $f_i(\tau)$ specifies the probability that duration in status i will last exactly τ weeks for individuals characterized by attributes Z. The quantity $S_i(\tau\text{-}1)$, referred to as the survivor function, represents the probability that individuals with attributes Z will experience at least τ-1 weeks in status i.

Specifying the likelihood that a man experiences a sequence of weeks in a particular labor market status, recognizing the possibility that he may still be in that status at the end of the observation period (i.e., the spell is right censored), provides a framework for estimating the duration distribution in status i. The likelihood of observing a spell of length T for an individual with attributes Z is

$$L_i\,(T,Z) = \prod_{t=1}^{T-1} P_i(t,Z)\,\left[1-P_i(T,Z)\right]^{1-c}, \tag{B.3}$$

where c = 1 if the spell is right censored and = 0 otherwise. To obtain unbiased estimates of the transition probabilities P_i(t,Z) that determine the duration distributions we must implement weighted maximum likelihood methods to account for the nonrepresentative samples included in the NLSY. Introducing weights (ω_t) into the likelihood of observing a particular duration for an individual with attributes Z results in a log-likelihood function of

$$\ln L_i(T,Z)=\left\{\sum_{t=1}^{T-1}\omega_t\ln\left[P_i(t,Z)\right]\right\}+\omega_T(c-1)\ln\left[1-P_i(T,Z)\right]. \tag{B.4}$$

Maximizing the sum of the individual contributions represented by (B.4) over spells and individuals yields consistent parameter estimates that possess an asymptotic normal distribution with a known variance-covariance matrix (see Amemiya (1985) pp. 319-338).

In the specification of the probabilities $P_i(t,Z)$, the variables Z are set at the time of entry into the status, and the variable t represents the level of duration in status *i* accumulated up to the point of evaluation. The literature terms the influence of t on *P* as duration dependence and exploratory data analysis reveals that *P* is a highly nonlinear function of t, ruling out simple parametric formulations of duration dependence. Further, this preliminary data analysis suggests there are sophisticated interactions between individual attributes Z and the pattern of duration dependence. Accounting for this latter feature of the data rules out "proportional hazards" as a specification for *P*, which represents one of the most popular choices in the literature.

The following logit specification for the probabilities $P_i(t,Z)$ incorporates the desired features:

$$P_i(t,Z) = \frac{1}{1 + e^{Z_1\beta_i + g_i(t,Z_2,\alpha_i)}}, \tag{B.5}$$

where Z_1 and Z_2 are vectors of variables made up of the attributes Z, β_i and α_i are appropriately dimensioned parameter vectors, and the function $g_i(t,Z_2,\alpha_i)$ is given by

$$g_i(t,Z_2,\alpha_i) = \sum_{j=1}^{K_i} \left[\Phi_{ij}(t) - \Phi_{ij-1}(t)\right]\left[\alpha_{ij0}Z_2 + t\alpha_{ij1}\right]. \tag{B.6}$$

The quantities $\Phi_{ij}(t)$ denote the cumulative distribution function (cdf) of a normal random variable possessing mean μ_{ij} and variance σ^2_{ij} and their inclusion in $g_i(\bullet)$ results in a smooth spline function that determines the duration properties associated with the time spent in labor market status *i*.

To understand the nature of these splines, consider the properties of $g_i(\bullet)$ which allow for increasing, decreasing or non-monotonic forms of duration dependence. The presence of the cdf's in (B.6) incorporates spline features in $g_i(\bullet)$ so that the polynomial $\alpha_{ij0} Z_2 + t\, \alpha_{ij1}$ represents $g_i(\bullet)$ over only a prespecified range of t and the inclusion of Z_2 in $g_i(\bullet)$ allows the patterns of duration dependence to vary according to all the attributes included in this vector of variables. To describe the basic properties of $g_i(\bullet)$, suppose for the moment that Z_2 consists only of an intercept (i.e., $\alpha_{ij0} Z_2 + t\, \alpha_{ij1} = \alpha_{ij0} + t\, \alpha_{ij1}$). In particular, suppose one wishes to set $g_i(\bullet) = \alpha_{i10} + t\, \alpha_{i11}$ for values of t between 0 and t^* and set $g_i(\bullet) = \alpha_{i20} + t\, \alpha_{i21}$ for values of t between t^* and an upper bound of t^u. To create a specification of $g_i(\bullet)$ that satisfies this property assign $K_i = 2$ in (B.6); fix the three means determining the cdf's as $\mu_{i0} = 0$, $\mu_{i1} = t^*$, $\mu_{i2} = t^u$; and pick small values for the three standard deviations σ_{i0}, σ_{i1}, and σ_{i2}. These choices for the μ's and the σ's imply that the quantity $\Phi_{i1}(t) - \Phi_{i0}(t) = 1$ over the range $(0, t^*)$ and $= 0$ elsewhere, and the quantity $\Phi_{i2}(t) - \Phi_{i1}(t) = 1$ over the range (t^*, t^u) and $= 0$ elsewhere. The function $g_i(\bullet)$ possess the desired property and it is differentiable in t. Further, with the values of the μ_{ij}'s and the σ^2_{ij}'s set in advance of estimation, $g_i(\bullet)$ is strictly linear in the parameters α_i and known functions of t and Z_2. One can control where each spline or polynomial begins and ends by adjusting the values of the μ_{ij}'s. Similarly, one can also control how quickly each spline cuts in and out by adjusting the values of the σ^2_{ij}'s, with higher values providing for a more gradual and smoother transition from one polynomial to the next.

Preliminary analyses of the Kaplan-Meier hazard functions suggest $K_i = 5$ for each of the five labor market statuses: low-wage employment (ℓ); high-wage employment (*h*); simultaneous employment in both a low- and high-wage job (*b*); training activities (*e*); and nonemployment (*n*). Table B.1 presents the prespecified values of the five μ_{ij}'s and σ^2_{ij}'s. Separate empirical analyses are conducted for the four education categories denoted in the paper and the μ_{ij}'s and σ^2_{ij}'s are the same for all education categories. Further, extensive testing indicates the null hypothesis of $\alpha_{ij1} = 0$ for all i and j cannot be rejected at conventional significance levels and all of the estimated duration distributions imposed this restriction on the parameters.

Table B.1

Means and Standard Deviations of Smooth Spline Functions in Duration Distributions

Labor Market Status	μ_0 , σ_0	μ_1 , σ_1	μ_2 , σ_2	μ_3 , σ_3	μ_4 , σ_4	μ_5 , σ_5
ℓ	0, 0.1	8, 1.0	20, 2.0	50, 4.0	100, 8.0	1000, 1.0
h	0, 0.1	15, 1.0	50, 2.0	100, 4.0	200, 8.0	1000, 1.0
b	0, 0.1	4, 0.5	8, 0.5	20, 2.0	40, 2.0	1000, 1.0
e	0, 0.1	8, 1.0	20, 2.0	50, 4.0	100, 8.0	1000, 1.0
n	0, 0.1	4, 0.5	12, 1.0	30, 2.0	80, 4.0	1000, 1.0

The effects of the covariates Z are incorporated entirely through Z_2 by setting the β_i's equal to zero for all i. In addition to an intercept term, the empirical results in reported in the paper include two distinct sets of variables in the covariates Z_2: demographic characteristics represented by X; and variables H that summarize an individual's particular work history prior to the start of the current spell. The only attributes included in X are two indicator variables for racial origin (BLACK and HISPANIC). The work history variables H consist of the following measures: potential labor market experience measured as total number of weeks since the individual left school (EXP); two indicator variables for previous low-wage employment in the past 52 weeks and in the past 104 weeks since leaving school (LWJ1 and LWJ2); six indicator variables for schooling and the five labor market statuses to capture the economic status occupied by the individual prior to entering the current status (Ps, Pℓ, Ph, Pb, Pe, Pn); the total number of weeks employed since leaving school (EMP); the fraction of the last 52 weeks (or the time since leaving school if individual left school less than a year ago) spent in employment (EMP52); and the total number of weeks spent in training programs since leaving school (TRN).

Tables B.2 present the final specifications estimated for the four education groups. The first column in each table lists the definition of the variables included in Z_2 for all of the five labor market statuses and the rest of the table presents details of the parameter restrictions imposed in the final specification. In addition to parameter restrictions that are necessary to secure identification, we restrict the coefficients on the variables in Z_2, other than the constant term, in two ways: first, if none of the individual coefficients are significantly different from zero at conventional significance levels and a joint hypothesis test suggests that all of the parameters are equal to zero we impose this zero restriction; and second, we restrict the coefficients to be equal across spline points whenever a joint hypothesis test indicates this is a valid restriction. The upper entry in each cell of the table specifies the spline segments that contain the relevant variable. For example, consider Table B.2 for education category 11-, in the column corresponding to low-wage employment the intercept term has an entry of "1, 2, 3, 4, 5" indicating that this variable enters all five spline segments, whereas the covariate BLACK has an entry "1, 2, 3, 4" indicating that this variable is included in the first four splines but is not included in the last segment. The lower entry in a cell indicates the presence of any across spline segment parameter restrictions. For instance, the column corresponding to labor market status *b* in Table B.2 for education category 12, the lower entry for the variable indicating that the individual entered this status from a low-wage job ($P\ell$) is "2-3-4" indicating that the parameter for this variable is constrained to be equal across the second, third and fourth spline segments.

Table B.2
Specifications for Duration Distributions
High-School Dropouts (11-)

	Labor Market Status				
Variable	*ℓ*	*h*	*b*	*e*	*n*
Intercept	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5
BLACK	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
HISPANIC	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
P*ℓ*		1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
P*h*	1, 2, 3, 4			1, 2, 3	
P*b*	1, 2, 3, 4	1, 2, 3, 4			
P*e*	1, 2, 3, 4	1, 2, 3, 4			1, 2, 3, 4
P*n*					
P*s*	1, 2, 3, 4	1, 2, 3, 4		1, 2, 3	1, 2, 3, 4
ln(EXP)	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
ln(EXP) * (EMP/EXP)	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
(EMP/EXP)	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
EMP52	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
LWJ1	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
LWJ2	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4
TRN	1, 2, 3, 4	1, 2, 3, 4	1, 2 1-2	1, 2, 3	1, 2, 3, 4

Table B.2 (cont.)
High-School Graduates (12)

	Labor Market Status				
Variable	*ℓ*	*h*	*b*	*e*	*n*
Intercept	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5
BLACK	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
HISPANIC	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
P*ℓ*		1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
P*h*	1, 2, 3, 4			1, 2, 3	
P*b*	1, 2, 3, 4	1, 2, 3, 4			
P*e*	1, 2, 3, 4	1, 2, 3, 4			1, 2, 3, 4
P*n*					
P*s*	1, 2, 3, 4	1, 2, 3, 4		1, 2, 3	1, 2, 3, 4
ln(EXP)	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
ln(EXP) * (EMP/EXP)	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
(EMP/EXP)	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
EMP52	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
LWJ1	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
LWJ2	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4
TRN	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4 2-3-4	1, 2, 3	1, 2, 3, 4

Table B.2 (cont.)
Some College (13-15)

	Labor Market Status				
Variable	*ℓ*	*h*	*b*	*e*	*n*
Intercept	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5
BLACK	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
HISPANIC	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
P*ℓ*		1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
P*h*	1, 2, 3			1, 2, 3, 4 2-3-4	
P*b*	1, 2, 3	1, 2, 3, 4			
P*e*	1, 2, 3	1, 2, 3, 4			1, 2, 3
P*n*					
P*s*	1, 2, 3	1, 2, 3, 4		1, 2, 3, 4 2-3-4	1, 2, 3
ln(EXP)	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
ln(EXP) * (EMP/EXP)	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
(EMP/EXP)	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
EMP52	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
LWJ1	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
LWJ2	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3
TRN	1, 2, 3	1, 2, 3, 4	1, 2, 3 2-3	1, 2, 3, 4 2-3-4	1, 2, 3

Table B.2 (cont.)

College Graduates (16+)

	Labor Market Status				
Variable	*ℓ*	*h*	*b*	*e*	*n*
Intercept	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5
BLACK	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
HISPANIC	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
P*ℓ*		1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
P*h*	1, 2, 3 2-3			1, 2, 3 1-2-3	
P*b*	1, 2, 3 2-3	1, 2, 3, 4			
P*e*	1, 2, 3 2-3	1, 2, 3, 4			1, 2, 3
P*n*					
P*s*	1, 2, 3 2-3	1, 2, 3, 4		1, 2, 3 1-2-3	1, 2, 3
ln(EXP)	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
ln(EXP) * (EMP/EXP)	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
(EMP/EXP)	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
EMP52	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
LWJ1	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
LWJ2		1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3
TRN	1, 2, 3 2-3	1, 2, 3, 4	1, 2 1-2	1, 2, 3 1-2-3	1, 2, 3

B.2 Empirical Specifications of Initial Status and Entrance Probabilities

Multinomial logit specifications are used to estimate both types of entrance probabilities outlined in the main body of the paper. Simple specifications are used to estimate the initial labor market status probabilities that capture the probability an individual enters one of the five labor market statuses upon leaving school. More complex specifications are implemented to estimate the parameters of the entrance probabilities that determine the likelihood an individual enters a particular labor market status given he has just ended a spell in a different status. This sub-section first outlines the general statistical framework; it then turns to a presentation of the particular specifications used for the initial labor market status probabilities; and finally, the discussion addresses the specifications estimated for the entrance probabilities.

The statistical framework needed to examine the process that determines the probability an individual occupies a particular economic status when it is known he has just switched statuses involves what can generally be termed an "entrance" probability. These entrance probabilities reflect the likelihood an individual enters each of the alternative statuses immediately upon ending a period of time spent in a given status. Specifically, upon terminating an episode in status *k*, define the probability that an individual enters status *i* as

$$Pr(k \to i) = Pr(k \to i \mid T, Z), \; k \neq i, \tag{B.7}$$

after experiencing a spell of T weeks in status *k*. Formally, the quantity in (B.7) represents the probability an individual moves from residency in status *k* to occupancy of labor market status *i* conditional on ending a spell of T weeks in status *k* and on the covariates Z.

The inclusion of the supplemental samples from the NLSY requires us to implement weighted maximum likelihood procedures to estimate these entrance probabilities. Introducing weights ω_k into the likelihood of observing a transition out of status *k* for an individual who has occupied status *k* for T weeks with attributes Z yields a log-likelihood function of

$$\text{(B.8)} \qquad \ln L_k(T, Z) = \omega_k \left\{ \sum_{i=1}^{M} m(i) \ln Pr(k \to i \mid T, Z) \right\},$$

where there are M possible destination statuses and m(i) is an indicator variable that = 1 if the observed status change is to status *i* and = 0 otherwise. Maximizing the sum of the individual contributions represented by (B.8) over all observed transitions out of status *k* produces consistent and asymptotically normally distributed parameter estimates with a known variance-covariance matrix (see Amemiya (1985) pp. 319-338).

We parameterize the entrance probabilities using a multinomial logit specification with a general form given by

$$\text{(B.9)} \qquad Pr(k \to i \mid T, Z) = \frac{e^{Z_1\beta_{ki} + g_{ki}(T,\, Z_2,\, \alpha_{ki}) + a_{ki}(A,\, Z_3,\, \gamma_{ki})}}{\sum_{j \neq k} e^{Z_1\beta_{kj} + g_{kj}(T,\, Z_2,\, \alpha_{kj}) + a_{kj}(A,\, Z_3,\, \gamma_{kj})}}, \quad k \neq i,$$

where A is a particular attribute of an individual, Z_1 , Z_2 and Z_3 are vectors of individual attributes, α_{ki} , β_{ki} , and γ_{ki} are suitably dimensioned parameter vectors, and $g_{ki}(\bullet)$ and $a_{ki}(\bullet)$ are smooth spline functions that permit very flexible relationships between the entrance probability and the variables T, Z_2, A and Z_3. The functions $g_{ki}(\bullet)$ are identical to functions $g_i(\bullet)$ specified in B.6 with the normal cdf's now evaluated at the completed spell length of T. Whereas the functions presented in B.6 determine the characteristics of duration dependence, the smooth spline functions in these specifications determine how the likelihood of various entrances change with the length of the spell that has just terminated in status *k*. The functions $a_{ki}(\bullet)$ are defined very similarly to the $g_{ki}(\bullet)$ except the spline properties now relate to different values of the individual attribute A. Specifically, the quantity $a_{ki}(\bullet)$ is given by

$$a_{ki}(A,\ Z_3,\gamma_{ki}) = \sum_{j=1}^{K^a_{ki}} \left[\Phi_{kij}(A)-\Phi_{kij-1}(A)\right]\left[\gamma_{kij}Z_3\right],$$

where the $\Phi_{ki}(A)$ denotes a normal cdf with a prespecified mean and variance evaluated at the value of attribute *A*. These smooth spline functions permit the variables included in Z_3 to have a different influence on the entrance probability depending upon an individual's value of attribute A.

The initial labor market status probabilities reflect the likelihood an individual leaves school (status *s*) and enters each of the five labor market statuses *ℓ*, *h*, *b*, *e*, and *n*. We specify these probabilities as a simplification of the multinomial logit specification given in equation (B.9). Different models are estimated for each of the four education categories with the attributes Z measured at the time the individual permanently leaves school. The attributes Z only include demographic characteristics X because the nature of these probabilities rules out the possibility that they depend upon any labor market history variables. Specifically, Z_1 includes the two racial origin variables (BLACK and HISPANIC), the α's are all set to zero resulting in the $g_{si}(\bullet)$'s dropping out of the probability, Z_3 only includes an intercept, and the attribute A, which determines the nature of the $a_{si}(\bullet)$ functions, is equal to the age of the individual measured in months. The particular parameterization of the $a_{si}(\bullet)$ has $K^a_{si} = 2$ with the mean and variance of the normal cdf's being equal for the five potential labor market statuses but differing across the four educational groupings as shown in Table B.3.

Table B.3
Means and Standard Deviations for Smooth Splines in Initial Labor Market Probabilities

Education Category	11-	12	13-15	16+
Mean (weeks)	216.0	228.0	276.0	288.0
Standard Deviation	1.00	1.00	1.00	1.00

The entrance probabilities that characterize the likelihood of entering an alternative status given an individual has just ended a spell in a particular labor market status are estimated using a general specification of equation (B.9) including both the $g_{ki}(\bullet)$ and $a_{ki}(\bullet)$ smooth spline functions. The spline points determined by the duration of the preceding spell, which characterize the $g_{ki}(\bullet)$ functions, differ across the origin status *k* but are equal for the four educational categories. The adopted specification sets $K_{ki} = 2$ for all statuses *k* and *i*. Table B.4 presents the prespecified means and standard deviations for the entrance probabilities. To account for non-linear effects of labor market experience on these entrance probabilities the $a_{ki}(\bullet)$ spline functions set the attribute *A* equal to the total number of weeks of potential labor market experience measured at the beginning of the spell in status *k* that is just ending (i.e., the covariate EXP). We specify $K^{*}_{ki} = 2$ for all possible statuses and the locations of the spline points are identical across the statuses *k* but differ only slightly for the four educational categories. Table B.5 lists the means and standard deviations used in the $a_{ki}(\bullet)$ spline functions for the four educational categories.

Table B.4

Means and Standard Deviations for $g_{ki}(\bullet)$ Splines in Entrance Probabilities

Labor Market Status Exiting From	ℓ	*h*	*b*	*e*	*n*
Mean (duration in weeks)	20.0	50.0	4.0	20.0	12.0
Standard Deviation	2.0	2.0	0.5	2.0	1.0

Table B.5

Means and Standard Deviations for $a_{ki}(\bullet)$ Splines in Entrance Probabilities

Education Category	11-	12	13-15	16+
Mean (weeks of EXP)	200.0	200.0	200.0	104.0
Standard Deviation	50.00	50.00	50.00	50.00

The influence of individual attributes (Z) on the entrance probabilities are accounted for through all three covariate vectors, Z_1, Z_2 and Z_3. In addition to the demographic and labor market history variables discussed above in Section B.1, there are two additional covariates included in the entrance probabilities. The first additional covariate is the length of the spell in status *k* that is just ending (T) and is the same variable that determines the spline points in the $g_{ki}(\bullet)$ functions. The second added covariate is an indicator variable that is equal to 1 if the individual enrolled in any training program prior to the start of the just terminated spell (ANYTRN) and is included to account for any possible qualitative effects of participating in a training program after leaving school.

Table B.6 summarizes the covariates included in the final empirical specification distinguishing among the variables included in the vectors Z_1, Z_2 and Z_3. The columns in Table B.6 correspond to the labor market status the individual is leaving. The upper entry in each cell details whether the variable is included in the entrance probability for each particular destination status the person can enter from the relevant origin status. For example, from the origin status *n*, an entry of (ℓ, h, e) implies the entrance probabilities include this variable in the estimation of the probability of entering the possible destination statuses of low-wage employment, high-wage employment and training. If an possible destination status does not appear in an entire column, this implies that the estimated probability of entering this excluded status is identically zero for everyone leaving the relevant status. For instance, the probability of entering both low-wage and high-wage employment from nonemployment is set equal to zero and the status *b* does not appear in the column corresponding to status *n*. The lower entry in each cell indicates whether the variable is included in the final model for each of the four educational categories. Specifically, an entry of (11-, 12, 13-15, 16+) indicates the variable is included in the model for all educational categories while an entry of (11-, 12, 13-15) implies the variable is excluded from the model describing the entrance probabilities for college graduates.

Table B.6
Model Specifications for Entrance Probabilities

	Origin Labor Market Status				
Variable	*ℓ*	*h*	*b*	*e*	*n*
Variables included in Z_1					
P*ℓ*		*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
P*h*					
P*b*	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+			
P*e*	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+			*ℓ, h, e* 11-, 12, 13-15, 16+
P*n*	*h, b, e, n* 11-, 12, 13-15, 16+			*ℓ, h, n* 11-, 12, 13-15, 16+	
P*s*	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
P*s**BLACK					*ℓ, h, e* 11-, 12, 13-15, 16+
P*s**HISPANIC					*ℓ, h, e* 11-, 12, 13-15, 16+
ln(EXP) * (EMP/EXP)	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
(EMP/EXP)	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
EMP52	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
LWJ1	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
LWJ2	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
TRN	*h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h* 11-, 12, 13-15, 16+	*ℓ, h, b, e, n* 11-, 12, 13-15, 16+	*ℓ, h, e* 11-, 12, 13-15, 16+
ANYTRN	*e* 11-, 12, 13-15, 16+	*e* 11-, 12, 13-15, 16+			*e* 11-, 12, 13-15, 16+

Table B.6 (cont.)
Model Specifications for Entrance Probabilities

	Origin Labor Market Status				
Variable	*ℓ*	*h*	*b*	*e*	*n*
	Variables included in Z_2				
Intercept	***h, b, e, n*** 11-, 12, 13-15, 16+	***ℓ, b, e, n*** 11-, 12, 13-15, 16+	***ℓ, h*** 11-, 12, 13-15, 16+	***ℓ, h, n*** 11-, 12, 13-15, 16+	***ℓ, h, e*** 11-, 12, 13-15, 16+
BLACK[1]	***h, b, e, n*** 11-, 12, 13-15	***ℓ, b, e, n*** 11-, 12, 13-15	***ℓ, h*** 11-, 12, 13-15	***ℓ, h, n*** 11-, 12, 13-15	***ℓ, h, e*** 11-, 12, 13-15
HISPANIC[1]	***h, b, e, n*** 11-, 12, 13-15	***ℓ, b, e, n*** 11-, 12, 13-15	***ℓ, h*** 11-, 12, 13-15	***ℓ, h, n*** 11-, 12, 13-15	***ℓ, h, e*** 11-, 12, 13-15
T	***h, b, e, n*** 11-, 12, 13-15, 16+	***ℓ, b, e, n*** 11-, 12, 13-15, 16+	***ℓ, h*** 11-, 12, 13-15, 16+	***ℓ, h, n*** 11-, 12, 13-15, 16+	***ℓ, h, e*** 11-, 12, 13-15, 16+
	Variables included in Z_3				
Intercept	***h, b, e, n*** 11-, 12, 13-15, 16+	***ℓ, b, e, n*** 11-, 12, 13-15, 16+	***ℓ, h*** 11-, 12, 13-15, 16+	***ℓ, h, n*** 11-, 12, 13-15, 16+	***ℓ, h, e*** 11-, 12, 13-15, 16+
ln(EXP)[2]	***h, b, e, n*** 11-, 12, 13-15	***ℓ, b, e, n*** 11-, 12, 13-15	***ℓ, h*** 11-, 12, 13-15	***ℓ, h, n*** 11-, 12, 13-15	***ℓ, h, e*** 11-, 12, 13-15

[1] For education group 16+, the coefficients corresponding to the BLACK and HISPANIC variables in the second term of the g(•) spline are set to zero.

[2] For education group 16+, the coefficients corresponding to the variable ln(EXP) in the second term of the a(•) spline are set to zero.

Figure 1
Low Wage Definitions

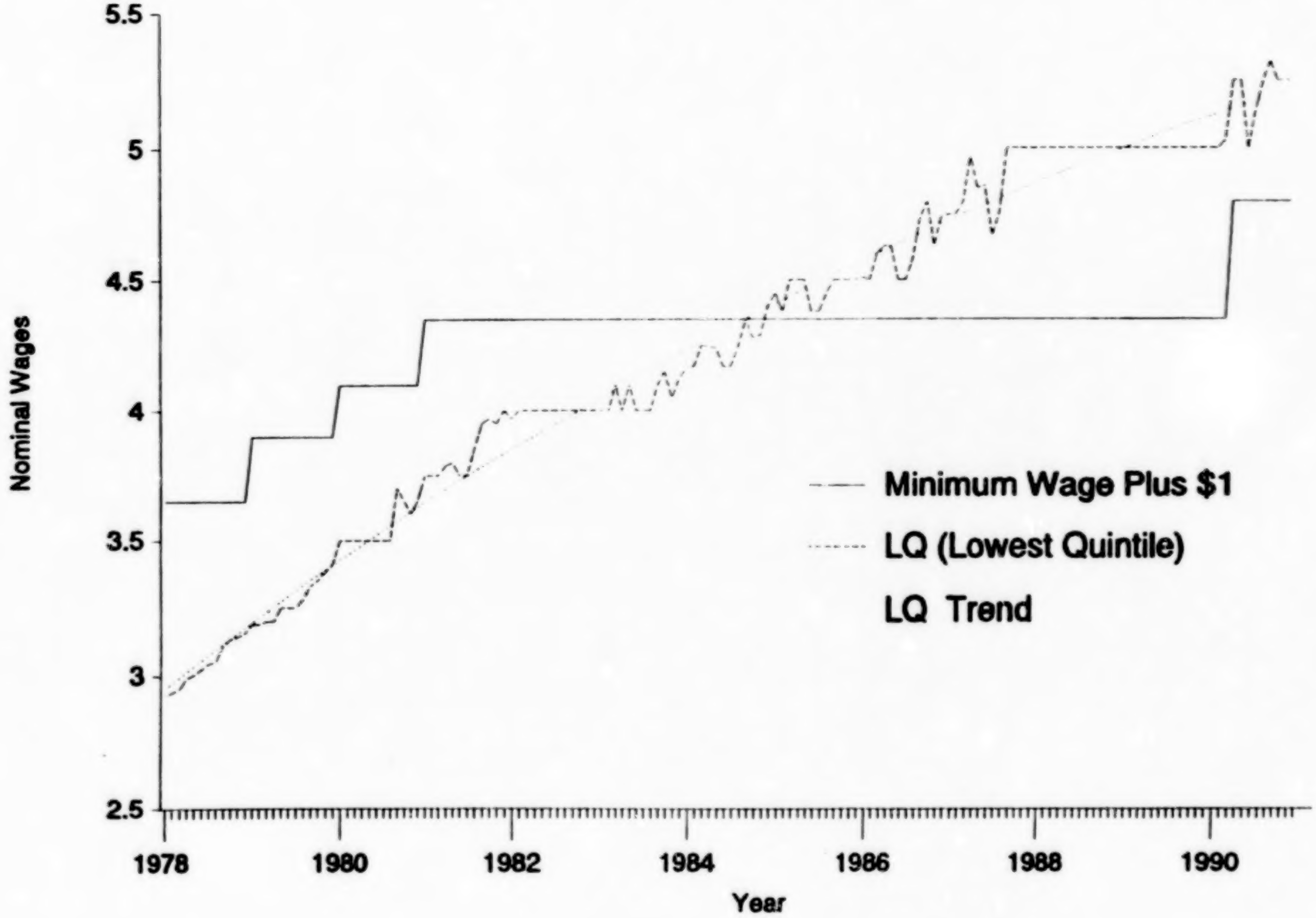

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TABLE 2.1
Summary Statistics of Individual Labor Market Experiences by Education Category

Variable	Mean	Std. Dev	5%	25%	50%	75%	95%
Less Than 12 Years of Education(11-): Number of Individuals = 667							
Age Left School	17.41	1.22	17	17	17	18	21
Years of Education	9.99	1.14	8	9	10	11	11
Percent Black	0.36						
Percent Hispanic	0.26						
Proportion with Any Employment	0.84						
Fraction of Observation Period Employed	0.59	0.3	0.07	0.36	0.63	0.86	1
Proportion with Any Low-Wage Employment-M	0.72						
Proportion with Any Low-Wage Employment-LQ	0.64						
Fraction of Observation Period Employed in Low-Wage Jobs-M	0.27	0.24	0.02	0.1	0.2	0.39	0.8
Fraction of Observation Period Employed in Low-Wage Jobs-LQ	0.24	0.22	0.02	0.08	0.17	0.34	0.7
Proportion of Time Employed Spent in Low-Wage Jobs-M	0.53	0.36	0.04	0.19	0.47	1	1
Proportion of Time Employed Spent in Low-Wage Jobs-LQ	0.49	0.36	0.04	0.15	0.4	0.87	1
Proportion with Any High-Wage Employment-M	0.65						
Proportion with Any High-Wage Employment-LQ	0.71						
Fraction of Observation Period Employed in High-Wage Jobs-M	0.44	0.28	0.03	0.2	0.42	0.69	0.9
Fraction of Observation Period Employed in High-Wage Jobs-LQ	0.46	0.3	0.03	0.19	0.43	0.73	0.95
Proportion with Any Simultaneous Low- and High-Wage Employment-M	0.16						
Proportion with Any Simultaneous Low- & High-Wage Employment-LQ	0.17						
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-M	0.04	0.08	0.002	0.003	0.01	0.05	0.19
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-LQ	0.05	0.1	0.002	0.003	0.02	0.07	0.21
Proportion with Any Training	0.32						
Number of Episodes of Training	1.53	0.82	1	1	1	2	3
Fraction of Observation Period Spent in Training	0.19	0.19	0.02	0.06	0.15	0.26	0.68
Fraction of Time in Training Also Employed	0.45	0.42	0	0	0.31	0.95	1
Proportion with Any Nonemployment	0.94						
Fraction of Observation Period Spent in Nonemployment	0.47	0.33	0.03	0.16	0.43	0.75	1

TABLE 2.1 (Cont.)

Variable	Mean	Std. Dev	5%	25%	50%	75%	95%
12 Years of Education(12): Number of Individuals = 911							
Age Left School	18.72	1.55	17	18	18	19	21
Years of Education	12						
Percent Black	0.33						
Percent Hispanic	0.16						
Proportion with Any Employment	0.91						
Fraction of Observation Period Employed	0.75	0.25	0.15	0.63	0.83	0.95	1
Proportion with Any Low-Wage Employment-M	0.69						
Proportion with Any Low-Wage Employment-LQ	0.61						
Fraction of Observation Period Employed in Low-Wage Jobs-M	0.3	0.26	0.02	0.1	0.21	0.43	0.89
Fraction of Observation Period Employed in Low-Wage Jobs-LQ	0.28	0.26	0.02	0.07	0.2	0.39	0.86
Proportion of Time Employed Spent in Low-Wage Jobs-M	0.46	0.35	0.04	0.14	0.37	0.8	1
Proportion of Time Employed Spent in Low-Wage Jobs-LQ	0.43	0.35	0.03	0.13	0.32	0.74	1
Proportion with Any High-Wage Employment-M	0.77						
Proportion with Any High-Wage Employment-LQ	0.81						
Fraction of Observation Period Employed in High-Wage Jobs-M	0.6	0.28	0.08	0.38	0.63	0.84	0.99
Fraction of Observation Period Employed in High-Wage Jobs-LQ	0.62	0.29	0.08	0.4	0.67	0.86	1
Proportion with Any Simultaneous Low- and High-Wage Employment-M	0.2						
Proportion with Any Simultaneous Low- & High-Wage Employment-LQ	0.2						
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-M	0.07	0.11	0.002	0.003	0.02	0.1	0.29
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-LQ	0.07	0.11	0.002	0.003	0.03	0.11	0.3
Proportion with Any Training	0.3						
Number of Episodes of Training	1.48	0.76	1	1	1	2	3
Fraction of Observation Period Spent in Training	0.16	0.17	0.01	0.05	0.11	0.2	0.47
Fraction of Time in Training Also Employed	0.73	0.38	0	0.44	0.98	1	1
Proportion with Any Nonemployment	0.86						
Fraction of Observation Period Spent in Nonemployment	0.31	0.33	0.01	0.06	0.17	0.45	1

TABLE 2.1 (Cont.)

Variable	Mean	Std. Dev	5%	25%	50%	75%	95%
More Than 12 and Less Than 16 Years of Education(13-15): Number of Individuals = 531							
Age Left School	22.3	2.61	19	20	22	24	27
Years of Education	13.83	0.77	13	13	14	14	15
Percent Black	0.33						
Percent Hispanic	0.2						
Proportion with Any Employment	0.94						
Fraction of Observation Period Employed	0.84	0.21	0.38	0.77	0.92	1	1
Proportion with Any Low-Wage Employment-M	0.4						
Proportion with Any Low-Wage Employment-LQ	0.37						
Fraction of Observation Period Employed in Low-Wage Jobs-M	0.28	0.28	0.01	0.07	0.16	0.4	1
Fraction of Observation Period Employed in Low-Wage Jobs-LQ	0.29	0.29	0.02	0.08	0.16	0.4	1
Proportion of Time Employed Spent in Low-Wage Jobs-M	0.39	0.35	0.02	0.1	0.26	0.67	1
Proportion of Time Employed Spent in Low-Wage Jobs-LQ	0.4	0.35	0.02	0.12	0.26	0.7	1
Proportion with Any High-Wage Employment-M	0.88						
Proportion with Any High-Wage Employment-LQ	0.88						
Fraction of Observation Period Employed in High-Wage Jobs-M	0.76	0.27	0.16	0.62	0.85	0.99	1
Fraction of Observation Period Employed in High-Wage Jobs-LQ	0.76	0.27	0.17	0.61	0.85	0.99	1
Proportion with Any Simultaneous Low- and High-Wage Employment-M	0.13						
Proportion with Any Simultaneous Low- & High-Wage Employment-LQ	0.13						
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-M	0.11	0.19	0.002	0.01	0.04	0.16	0.51
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-LQ	0.13	0.23	0.002	0.01	0.04	0.16	0.87
Proportion with Any Training	0.27						
Number of Episodes of Training	1.4	0.78	1	1	1	2	3
Fraction of Observation Period Spent in Training	0.15	0.18	0.01	0.03	0.07	0.18	0.48
Fraction of Time in Training Also Employed	0.82	0.34	0	0.85	1	1	1
Proportion with Any Nonemployment	0.64						
Fraction of Observation Period Spent in Nonemployment	0.26	0.3	0.01	0.03	0.14	0.38	1

TABLE 2.1 (Cont.)

Variable	Mean	Std. Dev	5%	25%	50%	75%	95%
16 and More Years of Education(16+): Number of Individuals = 591							
Age Left School	23.69	2.13	21	22	23	25	28
Years of Education	16.54	1.06	16	16	16	17	19
Percent Black	0.18						
Percent Hispanic	0.08						
Proportion with Any Employment	0.93						
Fraction of Observation Period Employed	0.86	0.2	0.34	0.81	0.94	1	1
Proportion with Any Low-Wage Employment-M	0.2						
Proportion with Any Low-Wage Employment-LQ	0.2						
Fraction of Observation Period Employed in Low-Wage Jobs-M	0.21	0.25	0.01	0.04	0.12	0.27	0.91
Fraction of Observation Period Employed in Low-Wage Jobs-LQ	0.23	0.27	0.01	0.04	0.12	0.27	1
Proportion of Time Employed Spent in Low-Wage Jobs-M	0.26	0.3	0.01	0.05	0.14	0.34	1
Proportion of Time Employed Spent in Low-Wage Jobs-LQ	0.28	0.31	0.01	0.06	0.15	0.39	1
Proportion with Any High-Wage Employment-M	0.9						
Proportion with Any High-Wage Employment-LQ	0.9						
Fraction of Observation Period Employed in High-Wage Jobs-M	0.83	0.22	0.28	0.74	0.91	1	1
Fraction of Observation Period Employed in High-Wage Jobs-LQ	0.82	0.22	0.28	0.74	0.91	1	1
Proportion with Any Simultaneous Low- and High-Wage Employment-M	0.1						
Proportion with Any Simultaneous Low- & High-Wage Employment-LQ	0.11						
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-M	0.14	0.2	0.003	0.01	0.07	0.17	0.73
Fraction of Observation Period Employed in Both High- & Low-Wage Jobs-LQ	0.14	0.21	0.003	0.01	0.07	0.16	0.74
Proportion with Any Training	0.29						
Number of Episodes of Training	1.49	0.84	1	1	1	2	3
Fraction of Observation Period Spent in Training	0.18	0.24	0.02	0.04	0.08	0.2	1
Fraction of Time in Training Also Employed	0.91	0.23	0.18	0.98	1	1	1
Proportion with Any Nonemployment	0.61						
Fraction of Observation Period Spent in Nonemployment	0.24	0.24	0.01	0.03	0.1	0.27	1

TABLE 2.2-LQ
Summary Statistics for Spells by Education Group

Variable	Mean	Std. Dev	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 11-: Number of Spells = 1081							
Age at Beginning of Spell	20.05	2.68	16.0	18.0	20.0	22.0	25.0
Weeks Since Left School (measured at beginning of Spell)	142.47	129.36	0.0	28.0	111.0	227.0	398.9
Fraction Black	0.41						
Fraction Hispanic	0.25						
Fraction Right Censored	0.07						
Length of Completed Spells	23.91	28.28	1.0	7.0	14.0	29.0	76.6
Episodes of High-Wage Employment for Education Group 11-: Number of Spells = 696							
Age at Beginning of Spell	20.59	2.67	17.0	18.0	20.0	23.0	25.0
Weeks Since Left School (measured at Beginning of Spell)	166.82	133.92	0.0	47.0	144.0	265.0	410.5
Fraction Black	0.10						
Percent Hispanic	0.12						
Fraction Right Censored	0.18						
Length of Completed Spells	41.14	52.52	2.0	9.0	22.0	48.0	155.0
Episodes of Both High- and Low-Wage Employment for Education Group 11-: Number of Spells = 166							
Age at Beginning of Spell	20.95	2.90	17.0	18.8	21.0	23.3	26.0
Weeks Since Left School(measured at beginning of Spell)	190.72	136.86	2.7	69.0	169.5	290.8	435.3
Fraction Black	0.31						
Percent Hispanic	0.19						
Fraction Right Censored	0.03						
Length of Completed Spells	9.49	12.70	1.0	1.0	2.0	14.0	39.6
Episodes of Training for Education Group 11-: Number of Spells = 329							
Age at Beginning of Spell	20.21	2.58	17.0	18.0	20.0	22.0	25.0
Weeks Since Left School (measured at beginning of Spell)	155.01	125.81	0.0	52.0	122.0	245.0	394.5
Fraction Black	0.42						
Percent Hispanic	0.24						
Fraction Right Censored	0.06						
Length of Completed Spells	36.06	33.07	4.0	13.0	26.0	52.0	100.0
Episodes of Nonemployment for Education Group 11-: Number of spells = 2096							
Age at Beginning of Spell	19.96	2.71	16.0	18.0	20.0	22.0	25.0
Weeks Since Left School(measured at beginning of Spell)	138.46	131.49	0.0	17.0	105.0	229.8	395.0
Fraction Black	0.38						
Percent Hispanic	0.26						
Fraction Right Censored	0.17						
Length of Completed Spells	26.20	36.17	1.0	4.0	13.0	35.0	93.0

TABLE 2.2-LQ (cont.)

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 12: Number of Spells = 1180							
Age at Beginning of Spell	20.76	2.53	18.0	19.0	20.0	23.0	25.0
Weeks Since Left School (measured at beginning of spell)	117.44	118.94	0.0	13.0	82.0	195.0	353.9
Fraction Black	0.40						
Fraction Hispanic	0.14						
Fraction Right Censored	0.10						
Length of Completed Spells	29.43	33.59	2.0	9.0	19.0	39.0	91.8
Episodes of High-Wage Employment for Education Group 12: Number of Spells = 1233							
Age at Beginning of Spell	21.20	2.64	18.0	19.0	21.0	23.0	26.0
Weeks Since Left School (measured at Beginning of spell)	142.35	127.70	0.0	32.0	114.0	234.0	389.3
Fraction Black	0.09						
Fraction Hispanic	0.06						
Fraction Right Censored	0.21						
Length of Completed Spells	51.87	64.93	2.0	11.0	27.0	64.8	192.5
Episodes of Both High- and Low-Wage Employment for Education Group 12: Number of Spells = 267							
Age at Beginning of Spell	21.50	2.67	18.0	19.0	21.0	23.0	26.0
Weeks Since Left School(measured at beginning of spell)	154.35	122.83	5.0	46.0	138.0	230.0	401.0
Fraction Black	0.24						
Fraction Hispanic	0.16						
Fraction Right Censored	0.03						
Length of Completed Spells	15.79	24.91	1.0	1.0	4.0	19.0	71.0
Episodes of Training for Education Group 12: Number of Spells = 405							
Age at Beginning of Spell	21.66	2.88	18.0	19.0	21.0	24.0	27.0
Weeks Since Left School (measured at beginning of spell)	158.42	140.16	0.0	35.0	117.0	266.5	445.5
Fraction Black	0.31						
Fraction Hispanic	0.17						
Fraction Right Censored	0.10						
Length of Completed Spells	24.80	20.51	4.0	9.0	21.0	34.0	69.0
Episodes of Nonemployment for Education Group 12: Number of Spells = 2350							
Age at Beginning of Spell	20.97	2.55	18.0	19.0	21.0	23.0	26.0
Weeks Since Left School(measured at beginning of spell)	126.98	119.92	0.0	22.0	95.0	207.0	365.5
Fraction Black	0.37						
Fraction Hispanic	0.15						
Fraction Right Censored	0.15						
Length of Completed Spells	16.17	26.06	1.0	3.0	7.0	20.0	58.6

TABLE 2.2-LQ (cont.)

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 13-15: Number of Spells = 305							
Age at Beginning of Spell	22.56	2.29	19.0	21.0	22.0	24.0	27.0
Weeks Since Left School (measured at beginning of spell)	70.69	87.35	0.0	3.0	38.0	100.0	262.4
Fraction Black	0.37						
Fraction Hispanic	0.17						
Fraction Right Censored	0.12						
Length of Completed Spells	29.68	30.54	1.4	10.0	21.0	42.0	88.4
Episodes of High-Wage Employment for Education Group 13-15: Number of Spells = 559							
Age at Beginning of Spell	23.71	2.77	20.0	21.0	23.0	26.0	29.0
Weeks Since Left School (measured at Beginning of spell)	92.10	112.38	0.0	0.0	51.0	146.0	342.0
Fraction Black	0.13						
Fraction Hispanic	0.07						
Fraction Right Censored	0.35						
Length of Completed Spells	55.23	65.83	2.3	12.5	31.0	69.5	199.5
Episodes of Both High- and Low-Wage Employment for Education Group 13-15: Number of Spells = 106							
Age at Beginning of Spell	23.23	2.68	20.0	21.0	23.0	25.0	28.7
Weeks Since Left School(measured at beginning of spell)	106.82	99.59	0.0	26.5	90.0	148.8	344.4
Fraction Black	0.27						
Fraction Hispanic	0.15						
Fraction Right Censored	0.06						
Length of Completed Spells	18.73	34.32	1.0	1.0	7.5	24.3	73.8
Episodes of Training for Education Group 13-15: Number of Spells = 200							
Age at Beginning of Spell	24.54	2.82	20.0	22.0	25.0	27.0	29.0
Weeks Since Left School (measured at beginning of spell)	143.51	130.06	0.0	35.0	111.0	216.0	402.6
Fraction Black	0.22						
Fraction Hispanic	0.18						
Fraction Right Censored	0.13						
Length of Completed Spells	16.99	17.54	4.0	5.0	9.0	22.0	56.0
Episodes of Nonemployment for Education Group 13-15: Number of Spells = 726							
Age at Beginning of Spell	23.15	2.58	20.0	21.0	23.0	25.0	28.0
Weeks Since Left School(measured at beginning of spell)	87.48	94.47	0.0	7.0	56.0	135.5	291.0
Fraction Black	0.40						
Fraction Hispanic	0.17						
Fraction Right Censored	0.15						
Length of Completed Spells	13.76	20.46	1.0	2.0	6.0	17.0	51.1

TABLE 2.2-LQ (cont.)

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 16+: Number of Spells = 159							
Age at Beginning of Spell	24.37	2.31	21.0	23.0	24.0	26.0	29.0
Weeks Since Left School (measured at beginning of spell)	64.26	87.76	0.0	0.0	31.0	91.0	264.0
Fraction Black	0.15						
Fraction Hispanic	0.07						
Fraction Right Censored	0.16						
Length of Completed Spells	23.28	29.38	1.0	6.0	14.0	36.3	60.5
Episodes of High-Wage Employment for Education Group 16+: Number of Spells = 743							
Age at Beginning of Spell	24.72	2.29	22.0	23.0	24.0	26.0	29.0
Weeks Since Left School (measured at Beginning of spell)	63.29	85.71	0.0	1.0	25.0	96.0	256.0
Fraction Black	0.06						
Fraction Hispanic	0.01						
Fraction Right Censored	0.44						
Length of Completed Spells	52.24	66.56	2.0	10.0	28.0	65.0	208.0
Episodes of Both High- and Low-Wage Employment for Education Group 16+: Number of Spells = 87							
Age at Beginning of Spell	24.91	2.34	22.0	23.0	25.0	27.0	29.0
Weeks Since Left School(measured at beginning of spell)	77.28	87.03	0.0	12.0	50.0	119.0	293.6
Fraction Black	0.18						
Fraction Hispanic	0.07						
Fraction Right Censored	0.09						
Length of Completed Spells	13.03	18.15	1.0	1.0	6.0	16.0	61.0
Episodes of Training for Education Group 16+: Number of Spells = 260							
Age at Beginning of Spell	25.39	2.33	22.0	24.0	25.0	27.0	30.0
Weeks Since Left School (measured at beginning of spell)	107.42	101.54	0.0	22.0	76.0	159.8	321.0
Fraction Black	0.16						
Fraction Hispanic	0.06						
Fraction Right Censored	0.10						
Length of Completed Spells	12.86	15.26	4.0	4.0	5.0	17.0	48.0
Episodes of Nonemployment for Education Group 16+: Number of Spells = 604							
Age at Beginning of Spell	24.19	2.23	22.0	22.0	24.0	26.0	29.0
Weeks Since Left School(measured at beginning of spell)	56.15	83.25	0.0	0.0	16.0	81.0	250.8
Fraction Black	0.18						
Fraction Hispanic	0.06						
Fraction Right Censored	0.12						
Length of Completed Spells	12.19	17.97	1.0	2.0	6.0	15.0	48.0

TABLE 2.2-M
Summary Statistics for Spells by Education Group

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 11-: Number of Spells = 1204							
Age at Beginning of Spell	19.61	2.49	16.0	18.0	19.0	21.0	24.0
Weeks Since Left School (measured at beginning of Spell)	120.22	119.04	0.0	18.0	85.0	192.0	367.0
Fraction Black	0.38						
Fraction Hispanic	0.26						
Fraction Right Censored	0.06						
Length of Completed Spells	26.79	32.24	1.7	8.0	16.0	34.5	87.3
Episodes of High-Wage Employment for Education Group 11-: Number of Spells = 1226							
Age at Beginning of Spell	21.11	2.60	17.0	19.0	21.0	23.0	25.0
Weeks Since Left School (measured at Beginning of spell)	190.81	133.54	4.0	77.0	174.0	291.3	424.0
Fraction Black	0.30						
Fraction Hispanic	0.26						
Fraction Right Censored	0.21						
Length of Completed Spells	42.83	55.29	2.0	10.0	24.0	50.0	167.8
Episodes of Both High- and Low-Wage Employment for Education Group 11-: Number of Spells = 148							
Age at Beginning of Spell	21.02	2.74	17.0	19.0	21.0	23.0	26.0
Weeks Since Left School (measured at beginning of spell)	190.77	131.82	16.9	77.5	170.5	286.3	435.1
Fraction Black	0.29						
Fraction Hispanic	0.20						
Fraction Right Censored	0.03						
Length of Completed Spells	8.35	12.53	1.0	1.0	1.0	12.8	39.0
Episodes of Training for Education Group 11-: Number of Spells = 329							
Age at Beginning of Spell	20.21	2.58	17.0	18.0	20.0	22.0	25.0
Weeks Since Left School (measured at beginning of spell)	155.01	125.81	0.0	52.0	122.0	245.0	394.5
Fraction Black	0.42						
Fraction Hispanic	0.24						
Fraction Right Censored	0.06						
Length of Completed Spells	36.06	33.07	4.0	13.0	26.0	52.0	100.0
Episodes of Nonemployment for Education Group 11: Number of Spells = 2096							
Age at Beginning of spell	19.96	2.71	16.0	18.0	20.0	22.0	25.0
Weeks Since Left School(measured at beginning of spell)	138.46	131.49	0.0	17.0	105.0	229.8	395.0
Fraction Black	0.38						
Fraction Hispanic	0.26						
Fraction Right Censored	0.17						
Length of Completed Spells	26.20	36.17	1.0	4.0	13.0	35.0	93.0

TABLE 2.2-M (cont.)

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 12: Number of Spells = 1352							
Age at Beginning of Spell	20.19	2.27	18.0	18.0	20.0	21.0	25.0
Weeks Since Left School (measured at beginning of spell)	91.48	104.47	0.0	3.0	54.0	140.8	314.4
Fraction Black	0.38						
Fraction Hispanic	0.14						
Fraction Right Censored	0.07						
Length of Completed Spells	31.93	36.66	2.0	9.0	20.0	43.0	99.0
Episodes of High-Wage Employment for Education Group 12: Number of Spells = 2078							
Age at Beginning of Spell	21.67	2.59	18.0	20.0	21.0	23.0	26.0
Weeks Since Left School (measured at Beginning of spell)	156.78	126.86	0.0	42.8	138.0	245.0	397.0
Fraction Black	0.29						
Fraction Hispanic	0.16						
Fraction Right Censored	0.24						
Length of Completed Spells	52.20	64.56	3.0	12.0	29.0	64.0	195.0
Episodes of Both High- and Low-Wage Employment for Education Group 12: Number of Spells = 262							
Age at Beginning of Spell	21.27	2.40	18.0	19.0	21.0	23.0	26.0
Weeks Since Left School(measured at beginning of spell)	136.86	106.26	3.0	47.5	127.5	205.8	336.0
Fraction Black	0.22						
Fraction Hispanic	0.18						
Fraction Right Censored	0.03						
Length of Completed Spells	14.82	23.54	1.0	1.0	4.0	18.0	71.0
Episodes of Training for Education Group 12: Number of Spells = 405							
Age at Beginning of Spell	21.66	2.88	18.0	19.0	21.0	24.0	27.0
Weeks Since Left School (measured at beginning of spell)	158.42	140.16	0.0	35.0	117.0	266.5	445.5
Fraction Black	0.31						
Fraction Hispanic	0.17						
Fraction Right Censored	0.10						
Length of Completed Spells	24.80	20.51	4.0	9.0	21.0	34.0	69.0
Episodes of Nonemployment for Education Group 12: Number of Spells = 2350							
Age at Beginning of Spell	20.97	2.55	18.0	19.0	21.0	23.0	26.0
Weeks Since Left School(measured at beginning of spell)	126.98	119.92	0.0	22.0	95.0	207.0	365.5
Fraction Black	0.37						
Fraction Hispanic	0.15						
Fraction Right Censored	0.15						
Length of Completed Spells	16.17	26.06	1.0	3.0	7.0	20.0	58.6

TABLE 2.2-M (cont.)

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 13-15: Number of Spells = 326							
Age at Beginning of Spell	22.15	2.29	19.0	20.0	22.0	24.0	26.7
Weeks Since Left School (measured at beginning of spell)	59.04	81.11	0.0	0.0	26.5	85.0	238.1
Fraction Black	0.35						
Fraction Hispanic	0.17						
Fraction Right Censored	0.10						
Length of Completed Spells	31.97	37.12	1.8	8.0	22.0	45.0	99.0
Episodes of High-Wage Employment for Education Group 13-15: Number of Spells = 980							
Age at Beginning of Spell	23.65	2.63	20.0	22.0	23.0	25.0	28.0
Weeks Since Left School (measured at Beginning of spell)	92.07	105.63	0.0	0.0	5.5	147.0	314.0
Fraction Black	0.31						
Fraction Hispanic	0.18						
Fraction Right Censored	0.38						
Length of Completed Spells	55.01	63.92	2.5	13.0	32.0	74.0	189.5
Episodes of Both High- and Low-Wage Employment for Education Group 13-15: Number of Spells = 99							
Age at Beginning of Spell	23.12	2.76	20.0	21.0	23.0	25.0	29.0
Weeks Since Left School(measured at beginning of spell)	96.74	96.93	0.0	23.0	75.0	145.0	351.0
Fraction Black	0.29						
Fraction Hispanic	0.14						
Fraction Right Censored	0.04						
Length of Completed Spells	20.79	35.59	1.0	1.0	8.0	29.0	74.6
Episodes of Training for Education Group 13-15: Number of Spells = 200							
Age at Beginning of Spell	24.54	2.82	20.0	22.0	25.0	27.0	29.0
Weeks Since Left School (measured at beginning of Spell)	143.51	130.06	0.0	35.0	111.0	216.0	402.6
Fraction Black	0.22						
Fraction Hispanic	0.18						
Fraction Right Censored	0.13						
Length of Completed Spells	16.99	17.54	4.0	5.0	9.0	22.0	56.0
Episodes of Nonemployment Group 13-15: Number of Spells = 726							
Age at Beginning of Spell	23.15	2.58	20.0	21.0	23.0	25.0	28.0
Weeks Since Left School(measured at beginning of spell)	87.48	94.47	0.0	7.0	56.0	135.5	291.0
Fraction Black	0.40						
Fraction Hispanic	0.17						
Fraction Right Censored	0.15						
Length of Completed Spells	13.76	20.46	1.0	2.0	6.0	17.0	51.1

TABLE 2.2-M (cont.)

Variable	Mean	Std. Dev.	5%	25%	50%	75%	95%
Episodes of Low-Wage Employment for Education Group 16+: Number of Spells = 156							
Age at Beginning of Spell	23.97	2.26	21.0	22.0	23.0	25.0	29.0
Weeks Since Left School (measured at beginning of spell)	54.75	83.61	0.0	0.0	18.0	67.8	262.2
Fraction Black	0.17						
Fraction Hispanic	0.09						
Fraction Right Censored	0.12						
Length of Completed Spells	24.47	32.54	1.0	5.5	13.0	34.5	87.0
Episodes of High-Wage Employment for Education Group 16+: Number of Spells = 1029							
Age at Beginning of Spell	24.73	2.29	22.0	23.0	24.0	26.0	29.0
Weeks Since Left School (measured at Beginning of spell)	63.79	86.27	0.0	0.0	24.0	98.5	256.0
Fraction Black	0.17						
Fraction Hispanic	0.08						
Fraction Right Censored	0.45						
Length of Completed Spells	51.95	64.33	2.0	11.0	29.0	66.0	191.3
Episodes of Both High- and Low-Wage Employment for Education Group 16+: Number of Spells = 80							
Age at Beginning of Spell	24.81	2.36	22.0	23.0	24.0	27.0	29.0
Weeks Since Left School(measured at beginning of spell)	69.44	78.93	0.0	9.3	49.5	108.8	230.3
Fraction Black	0.20						
Fraction Hispanic	0.08						
Fraction Right Censored	0.09						
Length of Completed Spells	12.96	17.96	1.0	1.0	5.0	16.5	60.9
Episodes of Training for Education Group 16+: Number of Spells = 260							
Age at Beginning of Spell	25.39	2.33	22.0	24.0	25.0	27.0	30.0
Weeks Since Left School (measured at beginning of spell)	107.42	101.54	0.0	22.0	76.0	159.8	321.0
Fraction Black	0.16						
Fraction Hispanic	0.06						
Fraction Right Censored	0.10						
Length of Completed Spells	12.86	15.26	4.0	4.0	5.0	17.0	48.0
Episodes of Nonemployment for Education Group 16+: Number of Spells = 604							
Age at Beginning of Spell	24.19	2.23	22.0	22.0	24.0	26.0	29.0
Weeks Since Left School(measured at beginning of spell)	56.15	83.25	0.0	0.0	16.0	81.0	250.8
Fraction Black	0.18						
Fraction Hispanic	0.06						
Fraction Right Censored	0.12						
Length of Completed Spells	12.19	17.97	1.0	2.0	6.0	15.0	48.0

TABLE 2.3-LQ
Summary Statistics for Entrances by Education Group

Origin Status	Destination Status				
	Low-Wage Employment	High-Wage Employment	Both High- & Low-Wage Employment	Training	Nonemployment
Education Group 11-					
Low-Wage Employment		0.16	0.53	0.16	0.31
High-Wage Employment	0.17		0.40	0.25	0.41
Both High- & Low-Wage Employment	0.05	0.08		0.01	0.00
Training	0.05	0.06	0.01		0.08
Nonemployment	0.62	0.63	0.03	0.51	
School	0.12	0.07	0.03	0.07	0.20
Education Group 12					
Low-Wage Employment		0.13	0.48	0.15	0.25
High-Wage Employment	0.20		0.44	0.53	0.54
Both High- and Low-Wage Employment	0.06	0.08		0.01	0.00
Training	0.04	0.10	0.03		0.04
Nonemployment	0.53	0.57	0.01	0.24	
School	0.17	0.12	0.03	0.06	0.17
Education Group 13-15					
Low-Wage Employment		0.09	0.38	0.08	0.17
High-Wage Employment	0.20		0.45	0.66	0.60
Both High- & Low-Wage Employment	0.07	0.07		0.02	0.00
Training	0.04	0.13	0.05		0.03
Nonemployment	0.46	0.44	0.02	0.15	
School	0.22	0.27	0.10	0.10	0.20
Education Group 16+					
Low-Wage Employment		0.04	0.32	0.05	0.09
High-Wage Employment	0.25		0.49	0.76	0.51
Both Low- & High-Wage Employment	0.13	0.05		0.02	0.00
Training	0.03	0.20	0.05		0.02
Nonemployment	0.33	0.44	0.01	0.08	
School	0.27	0.27	0.13	0.09	0.38

TABLE 2.3-M
Summary Statistics for Entrances by Education Group

Origin Status	Destination Status				
	Low-Wage Employment	High-Wage Employment	Both High- & Low-Wage Employment	Training	Nonemployment
Education Group 11-					
Low-Wage Employment		0.19	0.53	0.19	0.37
High-Wage Employment	0.10		0.42	0.22	0.35
Both High- & Low-Wage Employment	0.04	0.08		0.01	0.00
Training	0.05	0.07	0.01		0.08
Nonemployment	0.67	0.63	0.02	0.51	
School	0.15	0.04	0.01	0.07	0.20
Education Group 12					
Low-Wage Employment		0.17	0.54	0.19	0.30
High-Wage Employment	0.12		0.39	0.49	0.49
Both High- and Low-Wage Employment	0.05	0.08		0.01	0.00
Training	0.05	0.10	0.03		0.04
Nonemployment	0.56	0.56	0.01	0.24	
School	0.22	0.09	0.04	0.06	0.17
Education Group 13-15					
Low-Wage Employment		0.09	0.46	0.08	0.21
High-Wage Employment	0.14		0.37	0.66	0.56
Both High- & Low-Wage Employment	0.07	0.07		0.02	0.00
Training	0.04	0.14	0.05		0.03
Nonemployment	0.47	0.44	0.02	0.15	
School	0.28	0.26	0.09	0.10	0.20
Education Group 16+					
Low-Wage Employment		0.04	0.33	0.05	0.09
High-Wage Employment	0.16		0.49	0.76	0.50
Both Low- & High-Wage Employment	0.12	0.05		0.01	0.00
Training	0.02	0.21	0.05		0.02
Nonemployment	0.37	0.44	0.01	0.08	
School	0.33	0.26	0.13	0.09	0.38

TABLE 2.4-LQ
Summary Statistics for Exits by Education Group

Origin Status	Destination Status				
	Low-Wage Employment	High-Wage Employment	Both High- & Low-Wage Employment	Training	Nonemployment
Education Group 11-					
Low-Wage Employment		0.22	0.09	0.05	0.64
High-Wage Employment	0.15		0.06	0.07	0.72
Both High- & Low-Wage Employment	0.31	0.66		0.01	0.02
Training	0.16	0.29	0.01		0.54
Nonemployment	0.39	0.51	0.00	0.10	
School	0.19	0.15	0.01	0.03	0.61
Education Group 12					
Low-Wage Employment		0.29	0.12	0.06	0.53
High-Wage Employment	0.13		0.07	0.12	0.69
Both High- and Low-Wage Employment	0.29	0.66		0.02	0.02
Training	0.12	0.61	0.02		0.25
Nonemployment	0.31	0.64	0.00	0.05	
School	0.23	0.31	0.01	0.03	0.42
Education Group 13-15					
Low-Wage Employment		0.34	0.15	0.06	0.45
High-Wage Employment	0.09		0.07	0.20	0.64
Both High- & Low-Wage Employment	0.22	0.73		0.04	0.01
Training	0.07	0.79	0.03		0.11
Nonemployment	0.23	0.72	0.00	0.05	
School	0.13	0.53	0.02	0.04	0.28
Education Group 16+					
Low-Wage Employment		0.31	0.21	0.09	0.39
High-Wage Employment	0.07		0.07	0.34	0.52
Both Low- & High-Wage Employment	0.25	0.68		0.05	0.01
Training	0.02	0.91	0.02		0.05
Nonemployment	0.10	0.86	0.00	0.04	
School	0.07	0.47	0.02	0.04	0.39

TABLE 2.4-M
Summary Statistics for Exits by Education Group

Origin Status	Destination Status				
	Low-Wage Employment	High-Wage Employment	Both High- & Low-Wage Employment	Training	Nonemployment
Education Group 11-					
Low-Wage Employment		0.20	0.07	0.05	0.67
High-Wage Employment	0.12		0.06	0.07	0.74
Both High- & Low-Wage Employment	0.30	0.67		0.01	0.01
Training	0.19	0.26	0.01		0.54
Nonemployment	0.46	0.44	0.00	0.10	
School	0.27	0.08	0.00	0.03	0.61
Education Group 12					
Low-Wage Employment		0.28	0.11	0.06	0.55
High-Wage Employment	0.10		0.06	0.12	0.71
Both High- and Low-Wage Employment	0.28	0.68		0.02	0.02
Training	0.17	0.57	0.02		0.25
Nonemployment	0.38	0.57	0.00	0.05	
School	0.33	0.20	0.01	0.03	0.42
Education Group 13-15					
Low-Wage Employment		0.28	0.16	0.05	0.51
High-Wage Employment	0.07		0.06	0.21	0.65
Both High- & Low-Wage Employment	0.23	0.72		0.04	0.01
Training	0.08	0.78	0.03		0.11
Nonemployment	0.25	0.70	0.00	0.05	
School	0.18	0.49	0.02	0.04	0.28
Education Group 16+					
Low-Wage Employment		0.31	0.19	0.09	0.41
High-Wage Employment	0.04		0.07	0.35	0.54
Both Low- & High-Wage Employment	0.25	0.70		0.04	0.01
Training	0.01	0.92	0.02		0.05
Nonemployment	0.11	0.85	0.00	0.04	
School	0.09	0.46	0.02	0.04	0.39

Table 3.1-LQ

Participation Rates in Low-Wage Labor Markets
Percentages for Young Men by Age and Education[1]

Education	Period	Late 70s, Early 80s[2]			Mid 80s[2]		
		Late Teens[3]	Early 20s[3]	Late 20s[3]	Late Teens[3]	Early 20s[3]	Late 20s[3]
11-	3m	24 22 27 23	12 10 22 15	11 9 18 7	34 32 35 32	22 20 30 24	21 19 26 16
	6m	30 28 34 28	17 13 27 18	14 11 22 8	41 41 43 38	28 26 36 28	25 24 31 18
	1y	41 39 45 41	23 18 35 25	18 15 28 12	54 54 56 51	36 33 46 35	31 30 39 22
	2y	59 59 59 58	36 31 47 39	25 21 37 22	72 74 72 64	49 46 60 45	38 36 50 28
12	3m	25 24 25 23	10 10 15 8	5 4 12 5	33 32 34 32	18 18 24 17	13 12 21 14
	6m	30 30 31 29	13 12 19 9	7 6 15 6	38 38 40 39	21 20 28 19	15 14 24 16
	1y	39 38 42 40	17 16 25 15	9 7 19 12	49 48 52 51	27 26 35 26	19 17 29 23
	2y	56 56 57 56	27 25 39 26	15 12 32 16	66 66 65 68	37 35 47 38	25 22 40 28
13-15	3m	31 31 31 30	15 15 17 15	6 4 14 5	37 37 36 36	21 21 22 21	12 10 19 11
	6m	38 38 38 37	18 18 20 19	6 5 15 6	46 46 44 43	26 26 26 25	14 13 21 12
	1y	48 48 49 46	24 24 28 24	8 7 22 4	56 56 55 56	32 32 34 34	16 15 28 14
	2y	52 50 67 50	38 38 45 35	15 13 34 3	60 59 67 66	46 47 45 51	23 22 34 19
16+	3m	- - - -	13 13 17 18	8 7 9 19	- - - -	13 13 15 12	8 7 7 13
	6m	- - - -	17 15 21 20	9 8 11 21	- - - -	17 17 17 16	9 10 7 17
	1y	- - - -	20 20 25 28	10 10 10 32	- - - -	22 22 25 17	12 12 10 21
	2y	- - - -	28 27 28 42	9 7 11 53	- - - -	37 37 37 20	18 17 20 31

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[1] The percentages reported in this table are estimated using weighted least squares. The upper entry in each cell corresponds to figures for a nationally representative sample, and the three lower entires are for the race-ethnic groups White, Black, and Hispanic, respectively.

[2] Late 70s, Early 80s refers to the period 1978-1983; and Mid 80s refers to the period 1984-1987.

[3] Late Teens corresponds to age 19; Early 20s refers to age 23; and Late 20s corresponds to age 27.

Table 3.1-M

Participation Rates in Low-Wage Labor Markets
Percentages for Young Men by Age and Education[1]

Education	Period	Late 70s, Early 80s[2]			Mid 80s[2]		
		Late Teens[3]	Early 20s[3]	Late 20s[3]	Late Teens[3]	Early 20s[3]	Late 20s[3]
11-	3m	38 36 38 36	24 22 32 25	20 19 25 15	36 34 36 34	22 20 30 23	18 17 23 13
	6m	45 43 45 44	30 26 38 31	24 21 29 20	43 43 43 40	28 26 36 27	22 21 27 16
	1y	57 56 59 57	36 31 47 40	28 24 36 26	57 58 57 51	36 33 45 34	28 26 34 20
	2y	75 75 72 74	51 47 60 55	36 33 41 36	73 75 74 65	49 47 62 46	34 33 43 27
12	3m	38 38 37 39	17 16 25 17	11 11 19 15	38 38 35 37	17 16 23 15	11 11 17 13
	6m	45 45 44 49	22 20 30 22	15 13 24 20	43 43 42 46	20 18 28 19	13 11 22 17
	1y	56 56 56 59	27 26 37 28	18 16 29 26	54 54 54 55	25 24 35 24	16 14 27 22
	2y	75 74 70 80	39 36 53 42	24 20 43 33	73 74 64 74	37 36 47 36	22 20 37 27
13-15	3m	47 47 43 40	24 24 28 18	14 13 23 9	43 43 36 42	20 20 21 20	10 9 16 11
	6m	55 56 52 49	28 27 34 24	14 14 26 12	53 54 44 49	26 25 26 24	12 12 18 12
	1y	67 68 65 57	36 35 41 31	19 18 32 13	63 64 57 59	32 31 33 33	15 14 24 15
	2y	72 70 81 70	52 53 59 44	25 24 45 14	68 66 68 74	48 49 46 48	21 20 32 18
16+	3m	- - - -	19 20 23 24	13 12 12 24	- - - -	13 14 17 13	7 6 6 13
	6m	- - - -	24 23 28 28	16 14 15 27	- - - -	17 17 20 16	9 8 7 15
	1y	- - - -	30 30 37 37	18 18 19 37	- - - -	22 22 27 19	10 10 9 19
	2y	- - - -	39 37 44 56	17 15 19 60	- - - -	37 37 42 25	15 15 17 29

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[1] The percentages reported in this table are estimated using weighted least squares. The upper entry in each cell corresponds to figures for a nationally representative sample, and the three lower entires are for the race-ethnic groups White, Black, and Hispanic, respectively.

[2] Late 70s, Early 80s refers to the period 1978-1983; and Mid 80s refers to the period 1984-1987.

[3] Late Teens corresponds to age 19; Early 20s refers to age 23; and Late 20s corresponds to age 27.

Table 3.2-LQ

Percentage of Earnings Received from Low-Wage Employment
Average Percentage by Age and Education[1]

Education	Income Measure	Period	Late 70s, Early 80s[3]			Mid 80s[3]		
			Late Teens[3]	Early 20s[3]	Late 20s[3]	Late Teens[3]	Early 20s[3]	Late 20s[3]
11-	Total Individual Labor Income	3m	86 83 91 85	83 79 86 84	83 80 85 87	88 87 93 89	85 83 88 88	85 84 87 91
		6m	77 73 85 76	70 66 76 71	70 65 76 76	83 81 89 85	76 74 80 80	76 73 80 85
		1y	65 61 77 65	59 53 68 60	60 54 69 72	71 69 79 74	65 61 70 69	66 62 71 81
		2y	54 51 67 52	46 41 56 47	46 40 57 53	60 58 69 63	52 48 58 58	52 47 59 64
	Total Family Nontransfer Income	3m	79 76 86 80	74 69 80 77	66 58 78 74	81 80 88 82	76 73 82 79	68 62 80 76
		6m	70 66 79 70	62 56 70 64	53 43 69 62	76 75 83 79	68 65 74 73	59 52 73 71
		1y	58 53 70 59	51 43 62 55	45 34 61 59	64 63 72 65	57 53 64 61	51 44 63 65
		2y	46 42 58 46	39 32 49 41	36 27 49 44	53 50 62 56	46 40 53 51	43 35 53 54
	Total Family Income	3m	77 75 84 76	69 65 76 69	61 54 73 61	81 80 88 82	73 70 80 75	65 59 77 67
		6m	67 64 77 66	57 52 65 55	48 39 63 48	75 73 83 78	65 61 71 67	56 48 69 60
		1y	56 51 67 56	46 39 56 47	40 30 55 44	62 60 71 66	52 48 60 57	46 39 59 54
		2y	44 41 56 45	33 28 43 36	30 23 43 32	52 49 62 58	41 36 49 49	38 31 49 45
12	Total Individual Labor Income	3m	83 81 89 82	72 68 84 72	69 66 84 59	88 87 89 88	77 74 84 78	74 72 84 65
		6m	73 72 80 70	61 58 73 60	60 58 74 43	81 80 84 78	69 66 77 68	68 66 78 51
		1y	60 59 70 55	47 45 59 45	43 39 64 32	70 70 76 65	57 56 65 55	53 50 70 42
		2y	52 50 59 47	37 34 49 30	33 30 46 22	61 60 65 55	46 44 55 38	42 40 52 30
	Total Family Nontransfer Income	3m	73 70 80 73	61 57 77 62	50 44 72 46	80 78 80 81	68 65 77 70	57 52 72 54
		6m	63 61 70 61	52 48 66 51	43 37 61 34	72 71 74 71	61 58 70 61	52 47 65 44
		1y	50 49 59 45	40 37 53 35	31 26 54 23	60 60 63 56	50 48 57 46	41 37 58 34
		2y	39 39 44 33	31 29 43 26	26 23 40 16	47 47 48 39	39 37 47 32	34 31 44 22
	Total Family Income	3m	72 70 79 73	59 55 75 61	48 43 69 45	79 78 79 80	66 63 75 68	55 51 69 52
		6m	61 60 69 59	48 46 63 48	39 36 58 31	71 70 73 69	58 56 67 58	49 46 62 41
		1y	49 48 58 44	37 35 51 34	29 24 49 20	59 59 62 54	47 46 55 44	39 35 53 30
		2y	38 38 43 32	29 27 42 24	24 21 38 14	46 46 45 38	37 35 44 30	32 29 40 20

Table 3.2-LQ
Cont.

Education	Income Measure	Period	Late 70s.Early 80s[2]			Mid 80s[2]		
			Late Teens[3]	Early 20s[3]	Late 20s[3]	Late Teens[3]	Early 20s[3]	Late 20s[3]
13-15	Total Individual Labor Income	3m	84 84 89 89	76 75 78 84	69 69 65 85	88 88 93 87	80 79 82 82	73 73 69 83
		6m	77 77 83 83	64 63 66 74	57 55 57 72	81 81 92 81	68 67 75 72	61 59 66 70
		1y	66 65 75 73	52 51 55 63	46 44 48 55	70 69 83 69	56 55 63 59	50 48 56 51
		2y	62 62 70 60	38 38 41 49	32 30 37 49	64 62 78 54	40 38 49 43	34 30 45 43
	Total Family Nontransfer Income	3m	62 62 59 62	56 54 58 69	51 48 57 59	68 68 70 62	62 60 69 69	57 54 68 59
		6m	55 55 53 55	46 45 49 59	42 38 50 48	61 61 66 57	52 51 62 61	48 44 63 50
		1y	45 47 45 43	36 36 39 50	33 31 42 34	51 52 55 43	42 41 49 50	39 36 52 34
		2y	42 44 38 27	27 26 28 38	24 22 29 28	44 46 46 27	29 28 36 38	26 24 37 28
	Total Family Income	3m	62 62 58 62	54 52 57 68	48 45 56 57	68 68 68 62	60 58 67 68	54 51 66 57
		6m	55 55 52 55	44 43 47 57	38 35 48 47	61 61 65 57	50 49 60 59	44 41 61 49
		1y	45 46 45 43	35 35 37 49	30 28 39 34	51 51 55 43	41 40 47 49	36 33 49 34
		2y	41 43 38 27	26 25 26 37	22 20 27 28	43 45 46 27	28 27 34 37	24 22 35 28
16+	Total Individual Labor Income	3m	- - - -	71 72 61 78	56 56 33 56	- - - -	71 72 76 82	56 56 48 60
		6m	- - - -	60 60 56 68	48 48 28 51	- - - -	62 62 69 72	50 50 41 55
		1y	- - - -	43 43 41 39	33 33 13 38	- - - -	47 48 51 43	37 38 23 42
		2y	- - - -	32 31 36 21	26 25 10 54	- - - -	30 29 38 12	24 23 12 45
	Total Family Nontransfer Income	3m	- - - -	52 53 47 49	39 38 32 24	- - - -	54 55 60 62	41 40 45 37
		6m	- - - -	42 44 40 41	32 33 27 18	- - - -	46 46 51 56	36 35 38 33
		1y	- - - -	30 30 30 24	25 25 15 13	- - - -	32 32 36 36	27 27 21 25
		2y	- - - -	20 20 20 20	14 14 6 27	- - - -	22 22 24 16	16 16 10 23
	Total Family Income	3m	- - - -	52 53 47 49	39 38 32 23	- - - -	54 55 60 62	41 40 45 36
		6m	- - - -	42 43 40 41	32 33 27 18	- - - -	46 45 51 56	36 35 38 33
		1y	- - - -	30 30 30 24	25 25 15 13	- - - -	32 32 36 37	27 27 21 26
		2y	- - - -	20 19 20 20	15 14 6 27	- - - -	22 21 24 16	17 16 10 23

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[1] The percentages reported in this table are estimated using weighted least squares. The upper entry in each cell corresponds to figures for a nationally representative sample, and the three lower entires are for the race-ethnic groups White, Black, and Hispanic, respectively.

[2] Late 70s, Early 80s refers to the period 1978-1983; and Mid 80s refers to the period 1984-1987.

[3] Late Teens corresponds to age 19; Early 20s refers to age 23; and Late 20s corresponds to age 27.

Table 3.2-M

Percentage of Earnings Received from Low-Wage Employment
Average Percentage by Age and Education[1]

Education	Income Measure	Period	Late 70s, Early 80s[2]			Mid 80s[2]		
			Late Teens[3]	Early 20s[3]	Late 20s[3]	Late Teens[3]	Early 20s[3]	Late 20s[3]
11-	Total Individual Labor Income	3m	91 90 95 91	89 88 91 87	87 85 88 91	89 88 93 91	87 86 89 87	85 83 86 91
		6m	86 84 92 85	80 77 84 78	77 74 80 82	84 82 90 87	78 75 82 80	75 72 78 84
		1y	77 74 87 77	70 68 76 67	70 67 76 76	73 68 81 80	66 62 70 70	66 61 70 79
		2y	68 65 80 68	57 54 65 58	55 49 67 60	64 61 73 68	53 50 58 58	51 45 60 60
	Total Family Nontransfer Income	3m	85 83 90 84	80 77 85 79	69 63 80 74	83 81 88 86	78 75 83 81	67 61 78 76
		6m	78 76 86 79	70 66 77 69	59 51 73 65	78 76 84 83	70 66 75 73	59 51 71 69
		1y	69 65 79 70	62 58 70 60	55 47 68 62	65 61 74 72	58 54 65 62	51 43 63 64
		2y	58 55 70 62	48 44 58 52	44 37 58 51	56 53 65 62	46 42 53 52	42 35 53 51
	Total Family Income	3m	83 81 89 82	76 73 81 72	65 59 75 63	81 79 89 86	74 71 81 76	63 57 75 67
		6m	76 74 84 76	66 62 72 62	54 47 67 52	76 74 84 82	66 62 72 68	54 47 67 58
		1y	66 63 76 68	55 53 63 53	48 42 61 48	64 59 74 72	53 49 61 57	46 38 59 52
		2y	57 54 68 60	44 39 53 45	39 33 52 39	55 52 64 64	42 37 49 49	37 31 48 43
12	Total Individual Labor Income	3m	90 89 94 89	79 77 89 79	75 72 87 62	88 87 91 91	77 75 86 81	73 70 84 64
		6m	82 82 88 79	70 67 81 67	68 66 80 46	82 82 84 83	70 67 77 71	68 66 76 50
		1y	72 71 82 68	57 55 71 52	53 49 74 34	72 71 76 74	57 55 65 58	53 49 68 40
		2y	66 65 74 61	47 45 58 37	43 40 55 26	64 63 70 65	45 43 54 41	41 38 51 30
	Total Family Nontransfer Income	3m	81 79 86 80	68 64 83 68	55 50 75 49	81 81 82 84	68 66 79 72	55 52 71 53
		6m	72 71 78 71	60 57 75 57	49 45 67 37	74 73 74 77	62 59 71 63	51 47 63 43
		1y	62 60 69 59	49 46 65 41	40 34 63 25	62 62 63 67	49 48 59 49	40 36 57 33
		2y	52 51 55 49	40 38 52 32	34 32 47 22	50 49 51 49	38 36 48 32	32 30 43 22
	Total Family Income	3m	79 78 85 79	65 62 80 67	53 48 73 46	81 80 81 83	67 64 76 71	55 50 69 50
		6m	71 70 78 69	57 54 72 54	47 43 65 35	73 72 74 75	59 56 68 60	49 45 61 41
		1y	60 59 68 58	46 44 62 40	37 33 58 23	62 61 62 65	48 46 56 47	39 35 52 30
		2y	51 51 55 48	38 37 51 31	33 31 45 21	49 49 49 48	36 35 45 31	31 29 39 21

Table 3.2-M
Cont.

Education	Income Measure	Period	Late 70s, Early 80s[2]			Mid 80s[2]		
			Late Teens[3]	Early 20s[3]	Late 20s[3]	Late Teens[3]	Early 20s[3]	Late 20s[3]
13-15	Total Individual Labor Income	3m	92 91 93 91	82 82 83 86	75 75 69 85	90 89 93 87	80 80 83 82	73 73 69 81
		6m	88 87 91 85	74 73 75 75	66 65 62 71	84 83 91 83	70 69 75 73	62 61 62 69
		1y	80 80 83 79	62 60 68 64	56 55 58 54	75 74 79 75	57 54 64 60	51 49 54 50
		2y	82 84 80 60	47 47 55 51	41 40 46 48	74 75 74 52	39 38 49 43	33 31 40 40
	Total Family Nontransfer Income	3m	70 70 66 67	63 61 67 70	57 54 64 58	70 70 68 67	63 61 69 70	57 54 66 58
		6m	65 65 61 60	55 54 59 59	50 47 57 47	63 63 65 62	53 52 63 61	48 45 61 49
		1y	57 59 53 52	45 44 51 50	41 40 50 32	55 55 53 52	43 40 51 50	39 36 50 32
		2y	58 62 46 34	34 33 39 38	31 30 38 27	52 56 42 34	28 27 35 38	25 24 34 27
	Total Family Income	3m	70 70 65 67	61 60 65 69	53 51 62 56	70 70 67 67	61 60 67 69	53 51 64 56
		6m	65 65 60 60	53 52 58 57	46 44 55 45	63 63 62 62	51 50 60 59	44 42 57 47
		1y	57 59 52 51	43 43 48 49	38 37 47 32	55 55 52 51	41 39 48 49	36 33 47 32
		2y	57 61 46 34	33 32 38 37	30 29 35 27	51 55 42 34	27 26 34 37	24 23 31 27
16+	Total Individual Labor Income	3m	- - - -	76 76 72 81	60 62 39 53	- - - -	72 72 79 87	56 58 46 59
		6m	- - - -	69 69 64 74	55 56 36 47	- - - -	64 63 70 80	50 50 42 53
		1y	- - - -	54 55 46 49	41 41 18 39	- - - -	48 49 54 51	35 35 26 41
		2y	- - - -	43 44 46 34	34 36 13 54	- - - -	32 31 50 22	23 23 17 42
	Total Family Nontransfer Income	3m	- - - -	57 57 54 55	43 44 38 23	- - - -	55 55 61 67	41 42 45 35
		6m	- - - -	50 51 45 49	38 39 34 16	- - - -	48 47 51 64	36 35 40 31
		1y	- - - -	38 38 32 35	30 31 20 15	- - - -	34 34 38 44	26 27 26 24
		2y	- - - -	27 26 31 32	17 17 10 26	- - - -	25 24 37 26	15 15 16 20
	Total Family Income	3m	- - - -	56 57 54 55	42 43 38 22	- - - -	56 55 61 68	42 41 45 35
		6m	- - - -	49 51 45 48	38 39 33 16	- - - -	47 47 51 63	36 35 39 31
		1y	- - - -	38 39 33 34	30 31 20 14	- - - -	34 34 39 44	26 26 26 24
		2y	- - - -	27 27 31 32	19 18 10 27	- - - -	24 23 37 26	16 14 16 21

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[1] The percentages reported in this table are estimated using weighted least squares. The upper entry in each cell corresponds to figures for a nationally representative sample, and the three lower entires are for the race-ethnic groups White, Black, and Hispanic, respectively.

[2] Late 70s, Early 80s refers to the period 1978-1983; and Mid 80s refers to the period 1984-1987.

[3] Late Teens corresponds to age 19; Early 20s refers to age 23; and Late 20s corresponds to age 27.

Table 6.1-LQ

Summary Statistics for Cumulative Experiences
(White, Black, Hispanic)

Labor Market Status	Education	Average Cumulative Weeks								
		Yrs. 1-10			Yrs. 1-5			Yrs. 6-10		
Low-Wage	11-	67	74	77	35	30	37	32	44	40
	12	75	96	76	46	55	44	28	41	32
	13 - 15	39	40	37	28	27	25	11	13	12
	16+	23	23	25	12	14	11	11	10	14
High-Wage	11-	278	143	228	112	57	92	165	86	137
	12	339	263	326	146	106	140	193	157	186
	13 - 15	410	374	420	194	172	198	215	201	223
	16+	405	426	409	195	200	201	210	226	207
Both	11-	8	4	3	4	2	2	5	2	1
	12	9	6	7	6	4	4	3	3	4
	13 - 15	10	16	4	4	7	2	6	9	3
	16+	6	7	6	3	4	3	2	3	3
Training	11-	30	59	31	17	29	17	13	30	14
	12	27	25	23	15	14	12	12	11	10
	13 - 15	33	23	19	11	8	7	21	15	11
	16+	39	18	42	18	8	19	21	9	24
Nonemployment	11-	137	241	180	92	142	113	45	98	68
	12	70	130	88	47	82	60	23	48	28
	13 - 15	28	67	40	22	46	29	7	21	12
	16+	48	46	39	32	34	26	16	12	12

Labor Market Status	Education	Participation Rate								
		Yrs. 1-10			Yrs. 1-5			Yrs. 6-10		
Low-Wage	11-	0.8	0.78	0.78	0.65	0.57	0.63	0.55	0.61	0.56
	12	0.74	0.82	0.75	0.64	0.71	0.65	0.42	0.58	0.44
	13 - 15	0.5	0.51	0.44	0.42	0.39	0.34	0.22	0.26	0.21
	16+	0.44	0.44	0.38	0.31	0.33	0.23	0.24	0.22	0.24
High-Wage	11-	0.98	0.87	0.97	0.93	0.68	0.88	0.96	0.75	0.9
	12	0.99	0.96	0.98	0.95	0.86	0.92	0.96	0.89	0.95
	13 - 15	1	1	1	0.99	0.97	0.99	0.97	0.97	0.98
	16+	1	1	1	0.98	0.98	0.97	0.98	0.99	0.98
Both	11-	0.37	0.23	0.23	0.2	0.11	0.1	0.24	0.14	0.14
	12	0.34	0.32	0.3	0.25	0.22	0.19	0.17	0.15	0.17
	13-15	0.32	0.33	0.16	0.2	0.19	0.09	0.18	0.21	0.08
	16+	0.33	0.31	0.25	0.17	0.17	0.12	0.2	0.19	0.17
Training	11-	0.53	0.69	0.53	0.35	0.5	0.35	0.31	0.5	0.32
	12	0.5	0.49	0.44	0.34	0.32	0.3	0.3	0.31	0.26
	13 - 15	0.62	0.54	0.46	0.34	0.27	0.24	0.46	0.38	0.31
	16+	0.64	0.62	0.59	0.42	0.4	0.39	0.52	0.47	0.51
Nonemployment	11-	0.99	1	0.99	0.98	0.99	0.98	0.86	0.89	0.87
	12	0.91	0.95	0.91	0.84	0.9	0.85	0.68	0.74	0.62
	13 - 15	0.85	0.92	0.86	0.74	0.84	0.72	0.5	0.68	0.6
	16+	0.8	0.82	0.72	0.7	0.72	0.57	0.49	0.5	0.46

Table 6.1-M

Summary Statistics for Cumulative Experiences
(White, Black, Hispanic)

Labor Market Status	Education	Average Cumulative Weeks								
		Yrs. 1-10			Yrs. 1-5			Yrs. 6-10		
Low-Wage	11-	72	76	83	47	42	50	25	35	32
	12	86	95	66	64	63	49	22	32	17
	13 - 15	48	45	37	36	33	28	12	13	9
	16+	31	21	24	15	11	12	16	9	12
High-Wage	11-	271	148	217	100	52	78	171	96	139
	12	330	277	342	131	106	138	199	171	205
	13 - 15	402	378	417	182	167	190	220	212	227
	16+	405	427	423	195	202	207	209	225	216
Both	11-	7	3	4	3	1	1	4	2	2
	12	8	6	10	5	4	6	3	2	4
	13 - 15	10	15	7	5	7	4	5	8	4
	16+	7	8	7	4	4	3	3	4	3
Training	11-	33	48	33	19	21	17	14	27	16
	12	25	20	24	14	11	14	12	9	10
	13 - 15	32	17	18	14	7	8	18	10	9
	16+	29	14	32	13	7	13	16	7	19
Nonemployment	11-	137	245	183	91	144	113	46	101	70
	12	71	122	79	47	76	54	24	45	25
	13 - 15	28	64	41	23	46	30	5	17	11
	16+	49	49	35	33	35	24	16	14	11

Labor Market Status	Education	Participation Rate								
		Yrs. 1-10			Yrs. 1-5			Yrs. 6-10		
Low-Wage	11-	0.83	0.78	0.8	0.75	0.63	0.72	0.49	0.55	0.5
	12	0.79	0.82	0.75	0.74	0.75	0.69	0.37	0.46	0.3
	13 - 15	0.61	0.6	0.53	0.55	0.5	0.44	0.22	0.24	0.17
	16+	0.52	0.52	0.41	0.35	0.39	0.27	0.31	0.26	0.23
High-Wage	11-	0.98	0.85	0.96	0.9	0.6	0.81	0.97	0.77	0.9
	12	0.99	0.97	0.99	0.92	0.87	0.92	0.97	0.93	0.98
	13 - 15	0.99	1	1	0.98	0.98	0.99	0.97	0.98	0.98
	16+	1	1	1	0.99	0.99	0.99	0.98	0.99	0.99
Both	11-	0.33	0.22	0.2	0.2	0.1	0.1	0.18	0.13	0.12
	12	0.3	0.28	0.34	0.23	0.21	0.27	0.12	0.1	0.14
	13-15	0.34	0.35	0.15	0.24	0.24	0.1	0.17	0.19	0.08
	16+	0.35	0.34	0.29	0.17	0.18	0.13	0.22	0.2	0.19
Training	11-	0.54	0.65	0.53	0.36	0.43	0.35	0.32	0.48	0.32
	12	0.5	0.47	0.47	0.34	0.3	0.31	0.32	0.3	0.29
	13 - 15	0.58	0.49	0.43	0.35	0.27	0.26	0.4	0.31	0.26
	16+	0.57	0.55	0.55	0.33	0.32	0.32	0.45	0.43	0.5
Nonemployment	11-	0.99	0.99	1	0.97	0.97	0.96	0.88	0.88	0.88
	12	0.92	0.94	0.9	0.85	0.88	0.85	0.66	0.7	0.58
	13 - 15	0.83	0.9	0.85	0.74	0.84	0.76	0.41	0.61	0.52
	16+	0.82	0.81	0.68	0.71	0.71	0.57	0.52	0.49	0.39

Table 6.2-LQ
Cumulative Experience During 10 Years Following School
(White, Black, Hispanic)

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 10	Low-Wage	11-	0	0	0	9	5	8	48	43	46	98	103	112	158	195	197
		12	0	0	0	0	22	0	49	76	47	112	143	110	196	221	199
		13 - 15	0	0	0	0	0	0	1	6	0	60	54	52	117	115	116
		16+	0	0	0	0	0	0	0	0	0	32	31	28	71	72	78
	High-Wage	11-	94	0	39	187	25	109	290	105	227	377	235	337	432	349	424
		12	148	46	90	266	143	229	358	278	355	437	381	444	489	453	498
		13 - 15	255	199	281	359	311	374	442	402	453	491	464	500	516	501	518
		16+	230	318	246	359	393	360	439	449	443	491	492	502	517	515	520
	Both	11-	0	0	0	0	0	0	0	0	0	3	0	0	21	11	5
		12	0	0	0	0	0	0	0	0	0	3	2	2	37	17	29
		13 - 15	0	0	0	0	0	0	0	0	0	2	7	0	29	55	3
		16+	0	0	0	0	0	0	0	0	0	2	2	1	17	20	16
	Training	11-	0	0	0	0	0	0	5	41	8	45	91	47	84	149	89
		12	0	0	0	0	0	0	0	0	0	34	28	33	72	72	66
		13 - 15	0	0	0	0	0	0	5	3	0	37	23	16	88	63	49
		16+	0	0	0	0	0	0	11	6	8	40	19	46	109	39	126
	Nonemployment	11-	29	64	34	56	126	85	110	236	152	183	346	257	283	434	367
		12	1	9	2	16	39	16	49	91	53	90	183	113	157	335	225
		13 - 15	0	2	0	3	20	6	17	49	25	39	92	56	66	153	95
		16+	0	0	0	3	4	0	23	26	16	63	60	51	116	112	98
	Low-Wage + Nonemployment	11-	57	127	76	107	210	146	183	332	251	283	421	369	387	480	442
		12	12	40	8	51	100	44	116	202	119	209	339	248	326	454	406
		13 - 15	1	9	0	13	37	15	46	80	50	93	144	109	163	241	182
		16+	0	0	0	10	15	7	47	49	37	101	94	85	161	155	156
1 - 5	Low-Wage	11-	0	0	0	0	0	0	20	9	18	55	48	59	98	91	101
		12	0	0	0	0	0	0	26	39	26	69	85	69	138	137	117
		13 - 15	0	0	0	0	0	0	0	0	0	45	37	32	90	92	85
		16+	0	0	0	0	0	0	0	0	0	10	14	0	43	43	42
	High-Wage	11-	7	0	0	53	0	26	114	28	78	170	97	145	209	168	203
		12	26	0	6	83	30	66	156	100	151	210	170	212	248	225	256
		13 - 15	94	52	92	161	129	161	212	191	220	251	232	255	260	259	260
		16+	94	119	107	162	170	167	215	212	223	253	253	260	260	260	260
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	10	1	1
		12	0	0	0	0	0	0	0	0	0	0	0	0	18	9	10
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	7	15	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	6	11	3

Table 6.2-LQ
Cont.

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 5 (cont.)	Training	11-	0	0	0	0	0	0	0	1	0	18	50	22	59	89	61
		12	0	0	0	0	0	0	0	0	0	17	13	13	53	48	44
		13 - 15	0	0	0	0	0	0	0	0	0	8	2	0	41	29	24
		16+	0	0	0	0	0	0	0	0	0	16	9	16	56	25	59
	Nonemployment	11-	17	39	21	40	83	57	80	144	103	129	201	164	191	252	221
		12	0	0	0	6	21	9	31	63	39	67	124	88	114	203	155
		13 - 15	0	0	0	0	7	0	9	33	14	32	67	44	58	110	79
		16+	0	0	0	0	0	0	12	16	4	42	47	37	88	91	73
	Low-Wage + Nonemployment	11-	36	71	47	72	122	96	119	181	154	181	232	209	231	260	251
		12	2	19	0	29	66	26	77	135	88	142	211	170	216	258	239
		13 - 15	0	0	0	4	19	3	32	56	32	75	105	79	128	183	147
		16+	0	0	0	1	3	0	24	32	15	64	68	56	111	117	99
6 - 10	Low-Wage	11-	0	0	0	0	0	0	6	16	11	48	60	55	95	135	127
		12	0	0	0	0	0	0	0	16	0	40	63	45	90	115	110
		13 - 15	0	0	0	0	0	0	0	0	0	0	8	0	27	39	41
		16+	0	0	0	0	0	0	0	0	0	0	0	0	43	35	53
	High-Wage	11-	44	0	0	108	0	57	182	54	143	236	159	221	255	236	253
		12	74	0	34	159	92	142	217	180	214	254	231	257	260	260	260
		13 - 15	121	96	147	202	174	214	246	227	248	259	254	260	260	260	260
		16+	120	169	117	187	214	179	235	244	232	258	258	257	260	260	260
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	11	3	2
		12	0	0	0	0	0	0	0	0	0	0	0	0	4	2	5
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	10	30	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	3	7	5
	Training	11-	0	0	0	0	0	0	0	1	0	10	48	15	51	91	50
		12	0	0	0	0	0	0	0	0	0	4	5	3	35	35	35
		13 - 15	0	0	0	0	0	0	0	0	0	11	10	4	67	39	25
		16+	0	0	0	0	0	0	2	0	1	20	9	24	56	23	77
	Nonemployment	11-	0	0	0	4	20	9	23	84	42	60	167	104	113	222	184
		12	0	0	0	0	0	0	7	21	6	29	61	31	64	151	78
		13 - 15	0	0	0	0	0	0	0	8	2	7	29	15	19	57	30
		16+	0	0	0	0	0	0	0	0	0	18	16	16	47	32	35
	Low-Wage + Nonemployment	11-	2	14	3	13	65	24	55	156	95	121	217	177	196	259	241
		12	0	0	0	1	10	0	22	65	20	76	146	92	153	241	203
		13 - 15	0	0	0	0	0	0	2	16	5	16	43	24	48	91	71
		16+	0	0	0	0	0	0	3	3	5	38	27	32	84	63	79

Table 6.2-M
Cumulative Experience During 10 Years Following School
(White, Black, Hispanic)

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 10	Low-Wage	11-	0	0	0	17	3	14	58	47	59	106	117	119	159	192	209
		12	0	0	0	13	18	0	61	70	43	124	138	97	206	221	172
		13 - 15	0	0	0	0	0	0	23	18	9	74	67	56	129	138	107
		16+	0	0	0	0	0	0	6	4	0	42	28	32	96	62	82
	High-Wage	11-	96	0	29	184	25	99	285	110	213	362	250	327	419	362	404
		12	157	57	149	254	172	271	351	293	368	424	384	438	483	454	485
		13 - 15	242	234	292	346	320	372	430	395	443	485	457	490	516	498	517
		16+	247	308	282	356	394	384	435	451	451	484	493	501	516	515	520
	Both	11-	0	0	0	0	0	0	0	0	0	2	0	0	19	6	5
		12	0	0	0	0	0	0	0	0	0	2	1	3	28	13	32
		13 - 15	0	0	0	0	0	0	0	0	0	3	4	0	27	60	8
		16+	0	0	0	0	0	0	0	0	0	1	3	1	23	32	21
	Training	11-	0	0	0	0	0	0	9	27	8	51	71	49	95	126	92
		12	0	0	0	0	0	0	1	0	0	33	27	36	74	63	72
		13 - 15	0	0	0	0	0	0	4	0	0	32	16	13	80	47	49
		16+	0	0	0	0	0	0	5	2	5	28	14	32	73	37	91
	Nonemployment	11-	27	54	32	61	122	82	111	244	153	186	357	266	288	440	387
		12	2	8	1	15	36	13	45	88	47	96	166	101	164	310	195
		13 - 15	0	1	0	3	19	5	16	50	26	38	89	59	69	145	99
		16+	0	0	0	4	4	0	27	25	13	67	63	47	116	121	92
	Low-Wage + Nonemployment	11-	73	130	88	118	211	156	188	345	259	280	428	370	387	484	457
		12	20	46	12	67	104	48	134	195	111	217	311	206	330	433	335
		13 - 15	1	12	1	19	45	21	54	88	55	110	157	114	183	224	178
		16+	0	0	0	17	14	4	54	43	33	114	94	85	192	166	146
1 - 5	Low-Wage	11-	0	0	0	1	0	0	38	16	37	76	66	78	111	121	124
		12	0	0	0	0	0	0	48	48	31	98	102	78	157	152	129
		13 - 15	0	0	0	0	0	0	14	2	0	59	48	42	103	105	88
		16+	0	0	0	0	0	0	0	0	0	15	16	9	54	36	45
	High-Wage	11-	1	0	0	36	0	10	97	17	61	155	93	136	196	163	187
		12	5	0	11	65	32	71	137	103	148	197	168	205	240	217	242
		13 - 15	77	64	89	138	119	152	199	178	207	241	221	249	260	252	260
		16+	96	118	121	163	175	177	212	220	230	251	251	260	260	260	260
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	9	1	1
		12	0	0	0	0	0	0	0	0	0	0	0	1	13	5	17
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	14	21	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	7	13	4

Table 6.2-M
Cont.

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 5 (cont.)	Training	11-	0	0	0	0	0	0	0	0	0	20	33	19	69	68	62
		12	0	0	0	0	0	0	0	0	0	17	10	17	47	41	50
		13 - 15	0	0	0	0	0	0	0	0	0	11	3	1	46	23	29
		16+	0	0	0	0	0	0	0	0	0	8	5	7	41	22	39
	Non-ployment	11-	9	32	13	35	77	50	79	147	103	134	213	167	188	258	231
		12	0	0	0	6	16	7	28	57	34	67	114	74	123	190	146
		13 - 15	0	0	0	0	8	1	11	34	16	32	71	45	60	106	84
		16+	0	0	0	0	0	0	14	14	5	47	48	31	90	95	71
	Low-Wage + Nonem-ployment	11-	46	79	63	84	139	104	131	197	170	195	248	228	240	260	260
		12	9	29	6	46	74	35	98	139	88	169	207	167	232	255	227
		13 - 15	0	4	0	11	29	8	44	65	43	84	117	87	140	172	145
		16+	0	0	0	3	3	0	30	27	15	70	65	53	128	121	98
6 - 10	Low-Wage	11-	0	0	0	0	0	0	0	5	0	35	48	41	81	108	102
		12	0	0	0	0	0	0	0	0	0	25	42	12	76	110	56
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	47	49	36
		16+	0	0	0	0	0	0	0	0	0	15	2	0	59	31	41
	High-Wage	11-	57	0	0	121	4	57	188	71	149	234	174	222	255	241	254
		12	95	16	91	169	119	178	224	193	233	254	250	259	260	260	260
		13 - 15	138	122	159	204	188	215	248	235	252	260	260	260	260	260	260
		16+	119	166	137	180	211	193	236	245	239	259	259	259	260	260	260
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	11	2	1
		12	0	0	0	0	0	0	0	0	0	0	0	0	1	1	6
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	5	26	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	5	11	9
	Training	11-	0	0	0	0	0	0	0	0	0	13	42	15	51	81	58
		12	0	0	0	0	0	0	0	0	0	6	4	5	35	33	35
		13 - 15	0	0	0	0	0	0	0	0	0	7	4	1	52	28	19
		16+	0	0	0	0	0	0	0	0	0	13	6	18	39	17	50
	Nonem-ployment	11-	0	0	0	5	22	8	25	86	44	65	171	111	123	226	194
		12	0	0	0	0	0	0	8	17	4	31	65	23	67	134	71
		13 - 15	0	0	0	0	0	0	0	6	1	4	25	13	17	48	31
		16+	0	0	0	0	0	0	1	0	0	19	18	11	49	42	28
	Low-Wage + Nonem-ployment	11-	2	10	3	14	55	23	49	144	86	111	210	171	180	257	236
		12	0	0	0	0	3	0	21	47	9	69	124	53	135	223	141
		13 - 15	0	0	0	0	0	0	1	12	2	16	38	21	59	90	69
		16+	0	0	0	0	0	0	8	3	0	47	31	25	96	68	76

Table 6.3-LQ

Number of Spells During 10 Years Following School
(White, Black, Hispanic)

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 10	Low-Wage	11-	0	0	0	1	1	1	2	2	2	4	3	4	5	5	5
		12	0	0	0	0	1	0	2	2	2	3	4	4	4	5	5
		13 - 15	0	0	0	0	0	0	1	1	0	1	2	1	3	3	2
		16+	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1
	High-Wage	11-	3	0	2	4	1	3	5	3	4	7	4	6	9	5	8
		12	2	1	1	3	2	2	4	4	4	6	5	5	8	7	7
		13 - 15	1	2	1	2	3	2	4	4	3	5	5	5	7	7	6
		16+	1	1	1	2	2	2	4	4	3	6	6	5	7	7	6
	Both	11-	0	0	0	0	0	0	0	0	0	1	0	0	2	1	1
		12	0	0	0	0	0	0	0	0	0	1	1	1	2	1	2
		13 - 15	0	0	0	0	0	0	0	0	0	1	1	0	2	2	1
		16+	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	Training	11-	0	0	0	0	0	0	1	1	1	1	2	1	2	3	2
		12	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2
		13 - 15	0	0	0	0	0	0	1	1	0	2	1	1	3	2	2
		16+	0	0	0	0	0	0	1	1	1	3	3	3	4	4	4
	Nonemployment	11-	2	2	2	4	3	4	6	5	5	8	6	7	10	8	9
		12	1	1	1	2	2	2	4	4	4	6	6	6	8	8	8
		13 - 15	0	1	0	1	2	1	2	3	2	4	5	4	5	6	5
		16+	0	0	0	1	1	0	2	2	1	3	4	2	5	5	4
1 - 5	Low-Wage	11-	0	0	0	0	0	0	1	1	1	2	2	2	4	3	3
		12	0	0	0	0	0	0	1	1	1	2	2	3	3	3	4
		13 - 15	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2
		16+	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1
	High-Wage	11-	1	0	0	2	0	1	3	1	2	4	2	3	5	3	4
		12	1	0	1	1	1	1	3	2	2	4	3	3	5	4	5
		13 - 15	1	1	1	1	2	1	2	2	2	3	3	3	5	4	4
		16+	1	1	1	1	1	1	2	2	2	3	4	3	5	5	4
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		12	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1

Table 6.3-LQ
Cont.

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 5 (cont.)	Training	11-	0	0	0	0	0	0	0	1	0	1	1	1	1	2	1
		12	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
		13 - 15	0	0	[illegible]	0	0	0	0	0	0	1	1	0	2	1	1
		16+	0	0	0	0	0	0	0	0	0	2	1	1	3	3	3
	Nonemployment	11-	1	1	1	2	2	2	4	3	3	5	4	4	6	5	6
		12	0	0	0	1	1	1	2	2	3	4	4	4	5	5	6
		13 - 15	0	0	0	0	1	0	2	2	1	3	3	3	4	4	4
		16+	0	0	0	0	0	0	1	1	1	2	2	1	3	3	2
6 - 10	Low-Wage	11-	0	0	0	0	0	0	0	1	0	1	2	2	3	3	3
		12	0	0	0	0	0	0	0	1	0	1	1	1	2	3	2
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		16+	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	High-Wage	11-	0	0	0	1	0	1	2	1	2	4	2	3	5	3	4
		12	0	0	0	1	0	0	2	1	1	3	3	2	4	4	3
		13 - 15	0	0	0	0	1	0	1	2	1	2	3	2	3	4	3
		16+	0	0	0	0	0	0	2	1	1	3	3	2	4	4	3
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		12	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	Training	11-	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1
		12	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1
		13 - 15	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1
		16+	0	0	0	0	0	0	1	0	0	2	1	2	3	2	3
	Nonemployment	11-	0	0	0	1	1	1	2	2	2	4	3	3	5	4	5
		12	0	0	0	0	0	0	1	1	1	2	2	2	4	4	3
		13 - 15	0	0	0	0	0	0	0	1	1	1	2	1	2	3	2
		16+	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2

Table 6.3-M
Number of Spells During 10 Years Following School
(White, Black, Hispanic)

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 10	Low-Wage	11-	0	0	0	1	1	1	2	2	2	4	3	4	6	5	5
		12	0	0	0	1	1	0	2	2	2	3	3	3	5	5	5
		13 - 15	0	0	0	0	0	0	1	1	1	2	2	1	3	3	2
		16+	0	0	0	0	0	0	1	1	0	1	1	1	2	2	2
	High-Wage	11-	2	0	1	4	1	2	5	2	4	7	4	5	9	5	7
		12	1	1	1	3	2	2	4	4	4	6	5	5	7	7	7
		13 - 15	1	1	1	2	2	2	4	4	3	5	5	5	7	6	6
		16+	1	1	1	2	2	2	4	4	3	6	5	5	7	7	6
	Both	11-	0	0	0	0	0	0	0	0	0	1	0	0	2	1	1
		12	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2
		13 - 15	0	0	0	0	0	0	0	0	0	1	1	0	2	2	1
		16+	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	Training	11-	0	0	0	0	0	0	1	1	1	1	2	1	2	3	2
		12	0	0	0	0	0	0	1	0	0	1	1	1	2	2	2
		13 - 15	0	0	0	0	0	0	1	0	0	2	1	1	3	2	2
		16+	0	0	0	0	0	0	1	1	1	2	2	2	4	4	4
	Nonemployment	11-	2	2	2	4	3	3	6	4	5	8	6	7	10	8	9
		12	1	1	1	2	2	2	4	4	3	6	6	5	8	7	7
		13 - 15	0	1	0	1	2	1	2	3	2	4	4	4	5	6	5
		16+	0	0	0	1	1	0	2	2	1	4	4	2	5	5	4
1 - 5	Low-Wage	11-	0	0	0	1	0	0	2	1	1	3	2	3	4	3	4
		2	0	0	0	0	0	0	1	1	1	3	3	3	4	4	4
		13 - 15	0	0	0	0	0	0	1	1	0	1	1	1	3	2	2
		16+	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1
	High-Wage	11-	1	0	0	1	0	1	3	1	2	4	2	3	5	3	4
		12	1	0	1	1	1	1	2	2	2	3	3	3	5	4	4
		13 - 15	1	1	1	1	1	1	2	2	2	3	3	3	4	4	4
		16+	1	1	1	1	1	1	2	2	2	3	3	3	5	4	3
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		12	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1

Table 6.3-M
Cont.

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 5 (cont.)	Training	11-	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1
		12	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
		13 - 15	0	0	0	0	0	0	0	0	0	1	1	1	2	1	1
		16+	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2
	Nonemployment	11-	1	1	1	2	2	2	4	3	3	5	4	5	6	5	6
		12	0	0	0	1	1	1	2	2	2	4	4	4	5	5	5
		13 - 15	0	0	0	0	1	1	2	2	2	3	3	3	4	4	4
		16+	0	0	0	0	0	0	1	1	1	2	2	1	4	4	2
6 - 10	Low-Wage	11-	0	0	0	0	0	0	0	0	0	1	2	1	2	2	2
		12	0	0	0	0	0	0	0	0	0	1	1	0	1	2	1
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		16+	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
	High-Wage	11-	0	0	0	1	0	1	2	1	2	4	2	3	5	3	4
		12	0	0	0	1	0	0	2	1	1	3	2	2	4	4	4
		13 - 15	0	0	0	0	0	0	1	1	1	2	2	2	3	3	3
		16+	0	0	0	0	0	0	1	1	1	3	3	2	4	4	3
	Both	11-	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
		13 - 15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
		16+	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	Training	11-	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1
		12	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
		13 - 15	0	0	0	0	0	0	0	0	0	1	1	0	2	1	1
		16+	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2
	Nonemployment	11-	0	0	0	1	1	1	2	2	2	4	3	3	5	4	5
		12	0	0	0	0	0	0	1	1	1	2	2	2	4	4	3
		13 - 15	0	0	0	0	0	0	0	1	1	1	2	1	2	3	2
		16+	0	0	0	0	0	0	0	0	0	2	1	1	3	2	2

Table 6.4-LQ
Length of Spells During 10 Years Following School
(White, Black, Hispanic)

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 10	Low-Wage	11-	4	3	4	8	8	10	19	18	18	35	37	39	60	74	77
		12	5	6	4	11	12	10	25	25	18	52	51	39	87	89	75
		13 - 15	8	8	6	13	12	16	28	24	36	60	55	67	87	88	105
		16+	4	6	10	11	12	18	23	22	36	51	42	64	77	76	103
	High-Wage	11-	4	5	4	10	11	10	28	30	27	69	72	68	170	221	185
		12	5	6	6	13	15	15	42	38	43	115	100	135	282	284	420
		13 - 15	10	8	13	24	22	33	58	56	84	174	142	213	433	340	492
		16+	7	7	13	20	20	35	58	57	86	155	170	184	410	409	453
	Both	11-	1	1	1	2	2	1	4	9	3	16	18	13	28	32	23
		12	1	1	1	1	1	2	3	3	5	24	16	24	52	43	47
		13 - 15	1	2	1	2	4	2	5	17	4	23	53	31	70	95	72
		16+	1	1	1	1	2	3	3	9	11	16	22	24	40	44	50
	Training	11-	5	8	8	11	17	17	25	38	29	53	61	52	79	83	78
		12	3	3	8	9	8	13	19	18	24	41	39	42	70	66	68
		13 - 15	2	2	2	4	5	4	10	12	10	31	25	24	73	57	58
		16+	2	1	2	4	2	4	9	5	10	19	10	25	54	18	59
	Nonemployment	11-	1	3	2	3	8	4	9	26	15	27	61	39	52	146	74
		12	1	2	1	2	4	3	7	14	8	19	34	21	41	68	51
		13 - 15	1	2	1	2	4	2	5	13	8	14	25	19	24	44	36
		16+	1	1	2	3	3	5	9	10	13	23	21	26	50	49	58
1 - 5	Low-Wage	11-	3	3	4	8	8	9	17	17	17	33	37	37	54	65	68
		12	5	6	4	11	12	9	23	24	17	48	50	36	82	93	68
		13 - 15	8	8	5	16	14	19	32	29	35	62	58	66	89	90	112
		16+	4	5	10	10	11	16	20	21	31	43	39	59	72	68	91
	High-Wage	11-	4	5	4	9	11	10	25	28	25	58	63	56	120	168	139
		12	5	5	6	12	13	13	36	35	38	89	84	106	-	-	-
		13 - 15	8	7	11	22	20	30	51	49	83	177	148	-	-	-	-
		16+	7	7	14	20	20	39	58	58	104	196	220	-	-	-	-
	Both	11-	1	1	1	2	2	1	7	8	3	19	18	16	35	36	26
		12	1	1	1	1	2	2	3	3	7	23	16	24	52	36	40
		13 - 15	1	1	1	2	4	2	4	10	5	15	45	24	52	95	64
		16+	1	1	1	2	4	4	7	13	13	21	32	32	44	52	59

Table 6.4-LQ
Cont.

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 5 (cont.)	Training	11-	7	11	10	13	19	18	26	39	29	54	62	56	81	85	82
		12	8	6	9	13	12	15	24	23	25	45	44	42	73	66	62
		13 - 15	2	3	3	6	7	5	14	14	12	31	29	27	61	61	58
		16+	2	1	2	4	2	4	9	6	11	22	11	26	64	20	63
	Nonemployment	11-	2	3	2	3	11	5	11	33	19	34	75	46	63	172	88
		12	1	2	1	3	5	3	8	16	9	23	42	25	47	79	57
		13 - 15	1	2	1	2	5	3	6	14	10	16	28	22	27	48	41
		16+	1	1	2	3	3	5	9	11	14	25	28	37	53	60	68
6 - 10	Low-Wage	11-	4	3	5	10	8	11	21	21	22	44	43	50	73	117	131
		12	5	6	4	13	13	10	30	27	23	58	54	52	102	91	112
		13 - 15	7	8	8	11	11	14	17	17	41	57	50	70	96	99	129
		16+	5	7	10	14	14	19	30	25	44	57	54	78	84	91	138
	High-Wage	11-	5	5	5	12	12	12	35	37	33	97	96	100	224	257	248
		12	7	7	8	21	19	23	68	51	70	162	156	245	-	-	-
		13 - 15	12	10	17	31	29	46	88	71	105	243	172	-	-	-	-
		16+	9	9	13	27	26	35	74	85	85	193	198	185	-	-	-
	Both	11-	1	1	1	2	2	2	4	9	2	15	18	11	26	30	16
		12	1	1	1	2	1	2	4	3	5	30	16	26	58	55	54
		13 - 15	1	2	1	2	5	2	8	26	7	41	62	42	88	113	75
		16+	1	1	1	1	2	2	2	6	7	8	17	21	30	33	36
	Training	11-	4	5	5	10	16	13	24	31	29	55	60	52	80	96	79
		12	2	2	4	5	5	11	14	14	23	39	37	41	75	68	77
		13 - 15	1	2	1	3	4	4	8	12	8	37	26	29	-	68	68
		16+	2	1	2	4	2	4	9	5	10	20	10	28	54	18	67
	Nonemployment	11-	1	2	2	2	6	4	7	22	11	20	57	33	43	145	72
		12	1	2	1	2	4	3	6	11	7	16	29	18	37	71	50
		13 - 15	1	2	1	2	3	2	4	10	5	11	22	16	19	38	24
		16+	1	1	2	2	2	4	9	8	12	22	16	21	52	26	40

Table 6.4-M

Length of Spells During 10 Years Following School
(White, Black, Hispanic)

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 10	Low-Wage	11-	4	3	4	8	7	9	18	18	17	35	40	37	58	79	74
		12	4	6	4	11	12	10	24	25	20	52	52	43	87	91	70
		13 - 15	5	6	5	11	13	17	30	30	34	56	58	56	84	90	90
		16+	8	7	11	13	11	17	23	17	33	57	29	63	98	59	93
	High-Wage	11-	5	4	4	11	11	11	30	34	30	73	81	76	180	246	215
		12	6	6	6	15	15	14	44	41	45	128	105	164	345	330	421
		13 - 15	9	9	14	24	25	32	63	65	86	186	149	233	-	428	-
		16+	6	8	12	18	22	37	57	65	102	165	200	229	409	439	494
	Both	11-	1	1	1	2	2	1	8	3	3	16	13	13	30	25	29
		12	1	1	1	2	1	2	4	3	5	25	17	24	57	48	55
		13 - 15	1	1	1	1	2	2	3	15	15	19	43	54	61	95	118
		16+	1	1	1	1	2	2	3	13	14	19	27	28	42	52	51
	Training	11-	5	8	7	12	16	15	26	32	32	55	57	57	82	81	84
		12	4	2	7	10	7	15	19	17	25	38	40	40	67	61	65
		13 - 15	2	2	2	4	5	4	10	11	11	26	22	25	62	52	54
		16+	2	1	2	4	2	4	9	5	9	19	11	21	44	19	55
	Nonemployment	11-	1	3	2	3	8	4	9	27	15	28	65	40	57	170	76
		12	1	2	1	3	4	3	8	14	8	20	35	20	42	67	47
		13 - 15	1	2	1	2	4	3	5	13	8	14	25	19	26	46	37
		16+	1	1	2	3	3	5	8	9	12	22	22	27	48	49	55
1 - 5	Low-Wage	11-	4	3	4	9	8	10	18	19	19	36	43	39	56	80	74
		2	4	6	4	11	13	10	24	24	19	50	52	41	87	94	72
		13 - 15	4	6	5	12	14	20	30	31	34	53	54	52	82	88	90
		16+	7	5	11	11	10	16	19	15	28	42	24	54	82	45	83
	High-Wage	11-	5	5	4	11	12	10	27	34	27	59	82	63	156	228	164
		12	6	5	5	14	14	13	39	36	40	106	88	135	-	-	-
		13 - 15	8	8	14	22	22	30	56	59	85	187	154	259	-	-	-
		16+	7	7	12	19	22	41	60	73	120	212	-	-	-	-	-
	Both	11-	1	1	1	2	2	1	4	3	2	15	10	10	26	19	17
		12	1	1	1	2	2	2	4	3	3	19	15	21	52	45	50
		13 - 15	1	1	1	1	2	2	3	9	15	17	36	62	58	78	124
		16+	1	1	1	1	3	5	8	14	17	25	28	36	45	52	57

Table 6.4-M
Cont.

Period Covering Years	Labor Market Status	Education	Percentile														
			10			25			50			75			90		
1 - 5 (cont.)	Training	11-	8	10	9	13	16	15	29	31	32	58	55	55	84	77	81
		12	8	4	11	13	11	17	23	19	26	41	44	41	66	66	68
		13 - 15	2	2	2	6	7	5	12	12	12	28	21	25	66	49	52
		16+	2	1	2	5	3	4	11	6	11	22	12	26	52	26	63
	Nonemployment	11-	2	4	2	4	11	6	11	35	20	34	79	48	67	190	98
		12	1	2	1	3	5	3	8	16	9	22	40	23	48	76	54
		13 - 15	1	2	1	2	5	3	6	14	10	16	29	22	29	51	40
		16+	1	1	2	3	3	5	8	10	13	24	26	35	55	57	63
6 - 10	Low-Wage	11-	3	3	3	8	6	9	18	17	17	35	40	39	61	97	111
		12	5	5	4	12	12	10	29	27	22	56	59	47	103	110	81
		13 - 15	7	9	7	11	12	12	25	26	34	63	65	65	103	93	88
		16+	10	9	11	16	13	18	31	22	35	75	38	76	122	88	114
	High-Wage	11-	5	5	5	13	12	12	35	39	37	98	111	106	217	249	251
		12	8	7	8	22	20	24	64	59	83	190	187	-	-	-	-
		13 - 15	16	12	16	35	32	42	102	88	120	-	216	-	-	-	-
		16+	8	10	14	23	27	38	74	85	102	202	222	225	-	-	-
	Both	11-	1	1	1	2	2	2	10	5	7	17	15	16	35	29	40
		12	1	1	1	2	1	2	13	3	14	39	21	32	67	49	68
		13 - 15	1	1	1	2	3	2	5	27	25	33	67	57	79	114	121
		16+	1	1	1	1	2	2	2	10	11	17	23	24	40	49	45
	Training	11-	4	6	5	9	16	14	23	33	31	52	60	59	86	94	100
		12	2	2	3	5	5	11	16	12	23	36	34	40	76	61	63
		13 - 15	1	2	1	3	4	3	7	11	8	32	25	30	96	60	64
		16+	2	1	2	4	2	4	8	5	9	19	9	21	45	16	54
	Nonemployment	11-	1	2	1	2	7	4	7	22	12	19	61	35	47	166	75
		12	1	2	1	2	4	3	6	13	7	19	32	18	37	70	42
		13 - 15	1	2	1	2	3	2	4	10	5	11	21	17	18	36	28
		16+	1	1	2	2	2	4	7	7	11	20	18	20	41	35	41

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Table 6.5-LQ

Durations To And From Low-Wage Employment During 10-Year Horizon
(White, Black, Hispanic)

Duration Measure	Education	Population Percentage Experiencing Event			Percentage at 0 Weeks			Percentiles Excluding Group at Zero														
								10			25			50			75			90		
Duration Until First Job given First Employment is Low-Wage	11-	37	46	38	49	29	40	12	30	22	24	52	34	47	110	66	83	210	119	176	320	210
	12	43	53	42	60	48	36	8	14	9	17	30	16	32	54	32	57	97	62	95	252	125
	13-15	23	23	20	79	72	69	5	12	7	14	20	22	35	39	42	76	64	74	123	109	109
	16+	15	17	5	53	64	94	5	4	8	9	9	8	41	20	13	89	60	32	340	244	32
Duration Until First Job given First Employment is High-Wage or Both	11-	62	48	61	21	12	23	15	23	18	29	38	32	47	78	54	82	170	102	157	319	202
	12	57	46	57	55	36	59	11	12	9	17	18	14	32	36	32	55	65	56	94	124	81
	13-15	76	77	80	65	46	57	7	10	7	11	18	15	20	28	25	45	48	45	80	76	75
	16+	85	83	95	49	51	58	6	7	11	12	15	22	30	37	50	59	63	77	110	89	178
Duration Until High-Wage or Both given entry into Low-Wage	11-	80	78	78	na	na	na	7	8	11	17	20	24	38	64	55	78	199	122	162	474	266
	12	74	82	75	na	na	na	9	14	9	24	27	20	50	56	47	93	125	104	188	261	216
	13-15	50	51	44	na	na	na	10	10	13	17	16	28	37	42	53	72	89	89	121	186	165
	16+	44	44	38	na	na	na	7	9	11	15	17	22	31	31	43	57	54	72	87	90	126
Duration Until Low-Wage given entry into High-Wage	11-	98	87	97	na	na	na	18	23	17	53	61	54	181	165	183	-	412	-	-	-	-
	12	99	96	98	na	na	na	17	17	13	61	53	44	284	173	237	-	-	-	-	-	-
	13-15	100	100	100	na	na	na	46	44	52	166	194	300	-	-	-	-	-	-	-	-	-
	16+	100	100	100	na	na	na	66	60	78	266	272	295	-	-	-	-	-	-	-	-	-
Duration Until Training given entry into Low-Wage	11-	80	78	78	na	na	na	53	41	53	144	95	146	444	269	500	-	-	-	-	-	-
	12	74	82	75	na	na	na	34	35	44	135	144	160	457	511	-	-	-	-	-	-	-
	13-15	50	51	44	na	na	na	57	26	28	133	119	118	316	393	405	-	-	-	-	-	-
	16+	44	44	38	na	na	na	20	17	28	55	80	64	173	216	225	489	-	-	-	-	-
Duration Until Low-Wage given entry into Training	11-	53	69	53	na	na	na	19	25	24	65	78	64	232	188	167	-	-	-	-	-	-
	12	50	49	44	na	na	na	26	22	29	82	67	69	377	173	201	-	-	-	-	-	-
	13-15	62	54	46	na	na	na	60	26	83	259	162	313	-	-	-	-	-	-	-	-	-
	16+	64	62	59	na	na	na	97	85	93	342	340	303	-	-	-	-	-	-	-	-	-

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Table 6.5-M

Durations To And From Low-Wage Employment During 10-Year Horizon
(White, Black, Hispanic)

Duration Measure	Education	Population Percentage Experiencing Event			Percentage at 0 Weeks			Percentiles Excluding Group at Zero														
								10			25			50			75			90		
Duration Until First Job given First Employment is Low-Wage	11-	57	58	59	45	28	45	14	20	17	24	35	29	47	78	58	81	193	105	153	297	194
	12	56	57	52	70	62	60	8	11	10	12	25	15	26	49	29	55	95	57	82	172	96
	13-15	36	33	33	84	83	78	9	15	12	16	23	17	39	33	38	84	70	73	119	109	90
	16+	21	26	15	54	60	71	5	4	10	11	11	34	40	39	56	71	77	73	130	164	195
Duration Until First Job given First Employment is High-Wage or Both	11-	43	37	40	12	5	10	18	24	23	32	48	34	58	92	62	106	202	135	238	365	248
	12	44	43*	47	41	23	41	9	11	10	13	20	15	25	42	28	47	71	59	74	123	90
	13-15	64	67	67	55	37	53	6	10	6	12	18	14	24	34	25	49	55	43	91	88	85
	16+	79	74	85	47	49	58	6	6	8	12	11	15	29	29	36	58	56	63	91	90	97
Duration Until High-Wage or Both given entry into Low-Wage	11-	83	78	80	na	na	na	8	8	12	20	20	27	42	77	63	87	227	141	161	443	285
	12	79	82	75	na	na	na	11	14	9	28	31	19	59	61	49	115	126	98	213	260	182
	13-15	61	60	53	na	na	na	8	10	14	17	18	30	41	45	52	75	89	84	134	156	145
	16+	52	52	41	na	na	na	9	9	13	17	14	22	31	25	40	65	44	73	116	81	107
Duration Until Low-Wage given entry into High-Wage	11-	98	85	96	na	na	na	21	18	21	54	62	54	205	196	229	-	510	-	-	-	-
	12	99	97	99	na	na	na	20	22	19	67	62	73	405	232	-	-	-	-	-	-	-
	13-15	99	100	100	na	na	na	32	39	66	112	149	343	-	-	-	-	-	-	-	-	-
	16+	100	100	100	na	na	na	65	83	117	266	285	347	-	-	-	-	-	-	-	-	-
Duration Until Training given entry into Low-Wage	11-	83	78	80	na	na	na	64	49	49	163	102	144	499	320	473	-	-	-	-	-	-
	12	79	82	75	na	na	na	36	62	40	129	206	143	457	-	-	-	-	-	-	-	-
	13-15	61	60	53	na	na	na	72	72	64	163	210	242	385	487	-	-	-	-	-	-	-
	16+	52	52	41	na	na	na	29	19	21	93	66	72	292	259	237	-	-	-	-	-	-
Duration Until Low-Wage given entry into Training	11-	54	65	53	na	na	na	20	24	19	62	62	61	241	202	209	-	-	-	-	-	-
	12	50	47	47	na	na	na	19	21	28	47	67	66	325	311	-	-	-	-	-	-	-
	13-15	58	49	43	na	na	na	55	23	75	223	130	269	-	488	-	-	-	-	-	-	-
	16+	57	55	55	na	na	na	86	82	186	252	284	383	-	-	-	-	-	-	-	-	-

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Table 6.6-1
Cumulative Weeks During Three Years Following Particular Two-Year Work Experience for High-School Dropouts (11-) (White, Black, Hispanic)

Labor Market Status	Work History	Participation Rate			Average Weeks			Percentile														
								10			25			50			75			90		
Low-Wage	Base Case	0.62	0.62	0.6	25	26	28	0	0	0	0	0	0	12	13	12	40	42	44	71	72	81
	More *n*	0.68	0.64	0.64	29	28	29	0	0	0	0	0	0	18	13	15	46	45	47	79	80	83
	Recent *n*	0.62	0.63	0.6	26	28	27	0	0	0	0	0	0	14	15	14	43	44	45	71	76	77
	Training	0.54	0.58	0.59	21	24	26	0	0	0	0	0	0	6	9	12	34	37	41	65	70	76
	Early *ℓ*	0.52	0.54	0.53	20	23	26	0	0	0	0	0	0	2	6	5	33	36	42	63	70	78
	No *ℓ*	0.42	0.47	0.42	15	18	19	0	0	0	0	0	0	0	0	0	21	28	28	55	59	64
High-Wage + Both	Base Case	0.98	0.93	0.95	89	75	82	24	5	11	52	29	37	91	68	82	131	120	126	152	154	154
	More *n*	0.97	0.92	0.94	73	55	66	12	3	6	33	14	25	71	42	59	107	88	101	140	134	136
	Recent *n*	0.98	0.92	0.95	86	68	76	20	3	8	51	22	32	88	59	73	125	112	117	151	154	152
	Training	0.98	0.94	0.96	90	74	83	23	6	12	53	26	41	94	69	82	129	122	125	153	156	155
	Early *ℓ*	0.98	0.94	0.95	97	80	86	29	8	11	65	31	46	104	79	88	135	132	131	151	154	151
	No *ℓ*	0.99	0.94	0.96	110	93	98	39	11	22	81	44	59	123	103	107	148	146	144	156	156	156
Training	Base Case	0.3	0.32	0.28	12	14	11	0	0	0	0	0	0	0	0	0	12	16	11	48	54	41
	More *n*	0.29	0.4	0.3	10	17	11	0	0	0	0	0	0	0	0	0	10	25	14	39	63	43
	Recent *n*	0.31	0.32	0.32	13	15	13	0	0	0	0	0	0	0	0	0	13	17	16	51	60	50
	Training	0.42	0.43	0.39	17	20	15	0	0	0	0	0	0	0	0	0	26	33	25	60	66	50
	Early *ℓ*	0.21	0.27	0.22	9	12	8	0	0	0	0	0	0	0	0	0	0	10	0	38	49	34
	No *ℓ*	0.2	0.21	0.25	8	10	10	0	0	0	0	0	0	0	0	0	0	0	0	31	47	39
Nonemployment	Base Case	0.86	0.8	0.81	30	41	36	0	0	0	4	4	3	19	30	25	48	69	57	77	101	89
	More *n*	0.94	0.9	0.92	44	57	51	2	1	2	12	19	17	38	53	44	66	86	76	93	120	109
	Recent *n*	0.88	0.82	0.86	31	44	40	0	0	0	5	5	7	21	35	30	51	73	63	75	103	95
	Training	0.82	0.78	0.81	27	38	32	0	0	0	2	2	2	16	30	21	44	61	55	70	94	81
	Early *ℓ*	0.89	0.82	0.84	30	42	35	0	0	0	5	4	4	19	28	22	46	68	58	76	106	87
	No *ℓ*	0.79	0.74	0.78	23	35	29	0	0	0	2	0	1	12	19	16	33	59	44	65	96	78
Low-Wage + Nonemployment	Base Case	0.92	0.9	0.89	55	67	63	2	0	0	16	24	18	49	67	60	89	105	102	120	136	134
	More *n*	0.97	0.96	0.96	73	85	79	13	15	12	39	51	43	72	86	80	107	123	118	133	145	143
	Recent *n*	0.92	0.9	0.9	57	72	67	2	1	0	19	29	24	51	74	64	87	110	107	119	141	134
	Training	0.88	0.87	0.88	48	62	58	0	0	0	11	19	15	41	60	54	78	96	92	112	131	127
	Early *ℓ*	0.94	0.91	0.93	50	64	61	2	1	2	14	19	18	41	60	56	78	105	95	111	137	135
	No *ℓ*	0.85	0.83	0.84	38	53	47	0	0	0	4	8	5	22	40	34	61	89	79	101	128	118

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Table 6.6-2

Cumulative Weeks During Three Years Following Particular Two-Year Work Experience for High-School Graduates (12) (White, Black, Hispanic)

Labor Market Status	Work History	Participation Rate			Average Weeks			Percentile														
								10			25			50			75			90		
Low-Wage	Base Case	0.56	0.63	0.59	28	32	30	0	0	0	0	0	0	8	19	11	50	54	51	82	92	88
	More *n*	0.68	0.72	0.7	34	38	35	0	0	0	0	0	0	20	28	23	58	63	58	89	93	87
	Recent *n*	0.58	0.63	0.64	30	33	32	0	0	0	0	0	0	10	17	16	51	57	53	92	93	94
	Training	0.56	0.62	0.6	29	33	30	0	0	0	0	0	0	8	18	11	47	54	51	90	93	94
	Early *ℓ*	0.42	0.43	0.44	23	23	23	0	0	0	0	0	0	0	0	0	33	33	32	79	83	80
	No *ℓ*	0.41	0.44	0.46	19	22	22	0	0	0	0	0	0	0	0	0	27	34	33	65	70	72
High-Wage + Both	Base Case	0.97	0.95	0.96	105	92	102	33	17	22	76	53	63	115	97	118	143	134	147	154	153	155
	More *n*	0.97	0.95	0.95	87	75	85	16	8	8	47	31	38	89	73	89	131	118	135	151	146	151
	Recent *n*	0.97	0.96	0.96	103	91	98	26	17	22	74	50	61	116	97	109	143	134	143	154	152	155
	Training	0.97	0.95	0.96	103	93	99	29	19	22	69	53	64	113	102	110	145	137	145	155	153	156
	Early *ℓ*	0.96	0.96	0.96	112	104	111	41	20	32	86	72	81	125	117	127	150	148	152	156	156	156
	No *ℓ*	0.98	0.97	0.96	113	106	110	45	31	29	87	76	78	127	116	126	151	150	151	156	156	156
Training	Base Case	0.15	0.13	0.14	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	13	10	15
	More *n*	0.18	0.17	0.16	5	4	5	0	0	0	0	0	0	0	0	0	0	0	0	17	16	19
	Recent *n*	0.15	0.13	0.14	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	15	12	15
	Training	0.26	0.2	0.22	8	5	7	0	0	0	0	0	0	0	0	0	2	0	0	31	18	29
	Early *ℓ*	0.21	0.18	0.19	6	5	6	0	0	0	0	0	0	0	0	0	0	0	0	21	15	27
	No *ℓ*	0.15	0.13	0.15	4	4	5	0	0	0	0	0	0	0	0	0	0	0	0	13	7	18
Nonemployment	Base Case	0.82	0.81	0.78	19	28	20	0	0	0	2	3	1	10	19	9	29	43	27	49	72	54
	More *n*	0.88	0.86	0.87	30	39	32	0	0	0	4	6	5	19	26	19	42	62	45	74	100	85
	Recent *n*	0.82	0.82	0.79	19	29	22	0	0	0	2	3	2	11	18	11	29	44	31	48	74	61
	Training	0.77	0.79	0.77	17	25	19	0	0	0	1	2	1	9	14	8	24	37	26	47	68	57
	Early *ℓ*	0.72	0.75	0.7	16	24	16	0	0	0	0	1	0	7	12	6	23	36	22	48	66	47
	No *ℓ*	0.73	0.73	0.74	19	25	20	0	0	0	0	0	0	9	13	8	30	38	29	55	69	55
Low-Wage + Nonemployment	Base Case	0.92	0.92	0.88	47	61	49	1	2	0	9	19	7	34	54	32	74	97	86	115	134	130
	More *n*	0.95	0.95	0.94	64	77	66	3	7	4	21	31	18	57	75	59	102	122	113	133	146	145
	Recent *n*	0.92	0.94	0.89	49	61	54	2	3	0	11	18	10	35	52	41	78	101	92	124	134	132
	Training	0.89	0.92	0.87	46	58	50	0	2	0	7	15	8	33	48	33	74	95	84	118	130	125
	Early *ℓ*	0.81	0.85	0.78	38	47	39	0	0	0	3	5	2	21	32	19	59	75	59	106	130	118
	No *ℓ*	0.81	0.82	0.82	38	47	42	0	0	0	3	5	3	25	36	25	62	76	69	102	117	117

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Table 6.6-3

Cumulative Weeks During Three Years Following Particular Two-Year Work Experience for Some College (13-15)

(White, Black, Hispanic)

Labor Market Status	Work History	Participation Rate			Average Weeks			Percentile														
								10			25			50			75			90		
Low-Wage	Base Case	0.4	0.36	0.29	18	16	14	0	0	0	0	0	0	0	0	0	24	17	7	67	63	59
	More *n*	0.45	0.38	0.31	19	16	13	0	0	0	0	0	0	0	0	0	27	19	6	66	55	52
	Recent *n*	0.46	0.37	0.28	22	18	15	0	0	0	0	0	0	0	0	0	33	24	8	72	66	60
	Training	0.38	0.33	0.28	18	13	14	0	0	0	0	0	0	0	0	0	20	13	6	69	49	61
	Early *ℓ*	0.3	0.28	0.26	12	10	11	0	0	0	0	0	0	0	0	0	8	6	1	47	38	45
	No *ℓ*	0.23	0.21	0.19	10	9	11	0	0	0	0	0	0	0	0	0	0	0	0	37	30	50
High-Wage + Both	Base Case	0.98	0.98	0.99	114	112	121	50	46	60	85	83	98	130	125	139	150	148	154	156	156	156
	More *n*	0.97	0.96	0.98	103	102	113	38	31	49	70	70	85	112	112	126	144	140	149	154	153	156
	Recent *n*	0.98	0.97	0.98	111	107	120	46	41	60	80	81	95	126	117	137	150	145	153	156	156	156
	Training	0.98	0.97	0.98	118	116	123	56	57	62	93	93	101	134	131	140	151	150	154	156	156	156
	Early *ℓ*	0.96	0.97	0.99	117	114	124	37	41	60	92	89	101	136	129	146	156	156	156	156	156	156
	No *ℓ*	0.97	0.97	0.98	127	122	129	69	66	73	114	105	120	142	136	147	154	153	156	156	156	156
Training	Base Case	0.38	0.26	0.23	12	7	6	0	0	0	0	0	0	0	0	0	12	2	0	42	23	19
	More *n*	0.48	0.34	0.31	15	8	8	0	0	0	0	0	0	0	0	0	18	9	5	55	29	28
	Recent *n*	0.34	0.25	0.21	9	8	6	0	0	0	0	0	0	0	0	0	8	1	0	33	26	20
	Training	0.32	0.24	0.19	11	7	5	0	0	0	0	0	0	0	0	0	8	0	0	42	27	17
	Early *ℓ*	0.35	0.28	0.2	16	12	8	0	0	0	0	0	0	0	0	0	11	5	0	59	41	18
	No *ℓ*	0.27	0.19	0.15	8	7	4	0	0	0	0	0	0	0	0	0	3	0	0	25	19	9
Nonemployment	Base Case	0.68	0.76	0.69	13	21	15	0	0	0	0	1	0	5	13	6	17	34	22	37	57	44
	More *n*	0.76	0.83	0.78	19	31	22	0	0	0	1	4	1	10	22	14	29	49	35	53	74	59
	Recent *n*	0.7	0.81	0.72	13	24	15	0	0	0	0	3	0	5	16	8	19	37	24	38	60	45
	Training	0.64	0.73	0.68	10	19	14	0	0	0	0	0	0	3	9	5	12	31	21	29	54	41
	Early *ℓ*	0.53	0.57	0.49	11	20	13	0	0	0	0	0	0	1	5	0	16	33	19	36	61	42
	No *ℓ*	0.65	0.74	0.62	11	18	11	0	0	0	0	0	0	3	9	3	15	27	16	32	51	34
Low-Wage + Nonemployment	Base Case	0.79	0.83	0.74	31	37	29	0	0	0	2	5	0	15	23	11	48	58	47	87	96	86
	More *n*	0.85	0.89	0.82	38	46	35	0	0	0	4	10	3	24	34	22	59	73	55	103	111	91
	Recent *n*	0.82	0.87	0.76	36	41	30	0	0	0	3	8	1	20	29	13	57	62	46	100	100	89
	Training	0.74	0.8	0.74	28	32	28	0	0	0	0	3	0	11	17	11	39	48	43	83	86	82
	Early *ℓ*	0.62	0.64	0.56	23	30	24	0	0	0	0	0	0	6	13	4	34	48	37	74	85	76
	No *ℓ*	0.72	0.78	0.69	21	27	23	0	0	0	0	2	0	8	14	6	27	38	30	62	75	71

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Table 6.6-4

Cumulative Weeks During Three Years Following Particular Two-Year Work Experience for College Graduates (16+)

(White, Black, Hispanic)

Labor Market Status	Work History	Participation Rate			Average Weeks			Percentile														
								10			25			50			75			90		
Low-Wage	Base Case	0.23	0.21	0.14	7	5	5	0	0	0	0	0	0	0	0	0	0	0	0	30	20	15
	More *n*	0.19	0.15	0.13	6	4	4	0	0	0	0	0	0	0	0	0	0	0	0	20	13	12
	Recent *n*	0.25	0.23	0.22	8	6	8	0	0	0	0	0	0	0	0	0	0	0	0	28	22	31
	Training	0.21	0.19	0.14	6	5	5	0	0	0	0	0	0	0	0	0	0	0	0	25	21	13
	Early *ℓ*	0.25	0.24	0.21	9	8	8	0	0	0	0	0	0	0	0	0	1	0	0	34	31	30
	No *ℓ*	0.17	0.17	0.19	6	6	8	0	0	0	0	0	0	0	0	0	0	0	0	23	19	30
High-Wage + Both	Base Case	1	1	1	131	137	135	89	107	97	118	127	127	141	143	146	154	155	156	156	156	156
	More *n*	1	1	1	125	131	127	82	96	80	112	121	114	135	138	137	149	148	150	156	155	156
	Recent *n*	1	1	1	130	135	130	87	101	86	119	124	117	141	143	141	154	155	155	156	156	156
	Training	1	1	1	132	136	133	92	104	93	118	127	123	141	142	143	154	154	155	156	156	156
	Early *ℓ*	1	1	1	133	136	137	91	98	100	120	125	127	145	146	147	156	156	156	156	156	156
	No *ℓ*	1	1	1	136	138	136	93	104	92	124	132	126	149	150	150	156	156	156	156	156	156
Training	Base Case	0.37	0.36	0.41	9	5	11	0	0	0	0	0	0	0	0	0	8	6	12	31	16	37
	More *n*	0.5	0.52	0.59	14	9	18	0	0	0	0	0	0	1	1	6	17	11	25	43	26	53
	Recent *n*	0.44	0.42	0.46	11	6	13	0	0	0	0	0	0	0	0	0	13	8	15	36	20	43
	Training	0.38	0.4	0.46	9	6	13	0	0	0	0	0	0	0	0	0	9	6	15	29	18	41
	Early *ℓ*	0.29	0.26	0.27	6	3	6	0	0	0	0	0	0	0	0	0	4	1	2	19	11	20
	No *ℓ*	0.26	0.25	0.26	6	3	6	0	0	0	0	0	0	0	0	0	1	1	1	18	11	20
Nonemployment	Base Case	0.56	0.58	0.44	9	9	5	0	0	0	0	0	0	3	3	0	13	15	8	25	25	17
	More *n*	0.67	0.7	0.52	12	13	7	0	0	0	0	0	0	6	7	2	17	19	10	30	32	21
	Recent *n*	0.5	0.52	0.38	8	8	5	0	0	0	0	0	0	0	1	0	11	13	6	22	24	17
	Training	0.59	0.59	0.46	9	9	6	0	0	0	0	0	0	4	4	0	14	15	8	25	25	19
	Early *ℓ*	0.57	0.59	0.46	8	9	5	0	0	0	0	0	0	2	3	0	11	13	7	23	26	17
	No *ℓ*	0.52	0.51	0.39	9	9	6	0	0	0	0	0	0	1	1	0	11	12	7	29	27	21
Low-Wage + Nonemployment	Base Case	0.63	0.62	0.51	16	14	10	0	0	0	0	0	0	6	6	1	22	21	12	49	40	29
	More *n*	0.7	0.73	0.59	17	17	11	0	0	0	0	0	0	8	10	4	23	24	14	49	42	30
	Recent *n*	0.57	0.57	0.5	15	15	12	0	0	0	0	0	0	4	4	0	20	21	16	47	44	38
	Training	0.63	0.63	0.54	15	15	10	0	0	0	0	0	0	6	7	2	21	22	13	46	40	29
	Early *ℓ*	0.65	0.65	0.57	17	17	13	0	0	0	0	0	0	6	6	3	23	24	18	53	51	42
	No *ℓ*	0.56	0.56	0.48	15	14	14	0	0	0	0	0	0	2	2	0	20	20	17	51	46	48

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